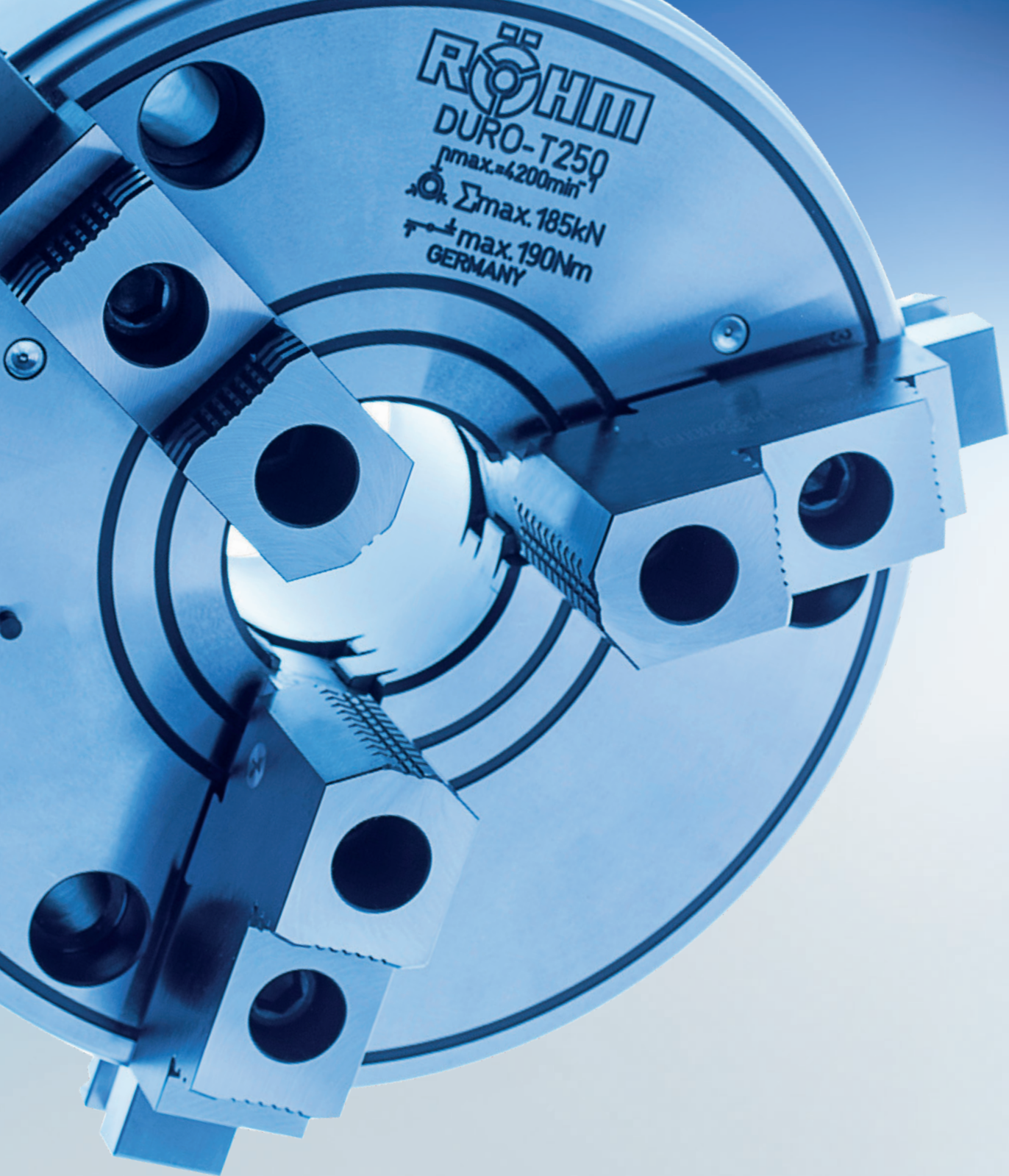




LATHE CHUCKS INDEPENDENT CHUCKS

EDITION 8.3



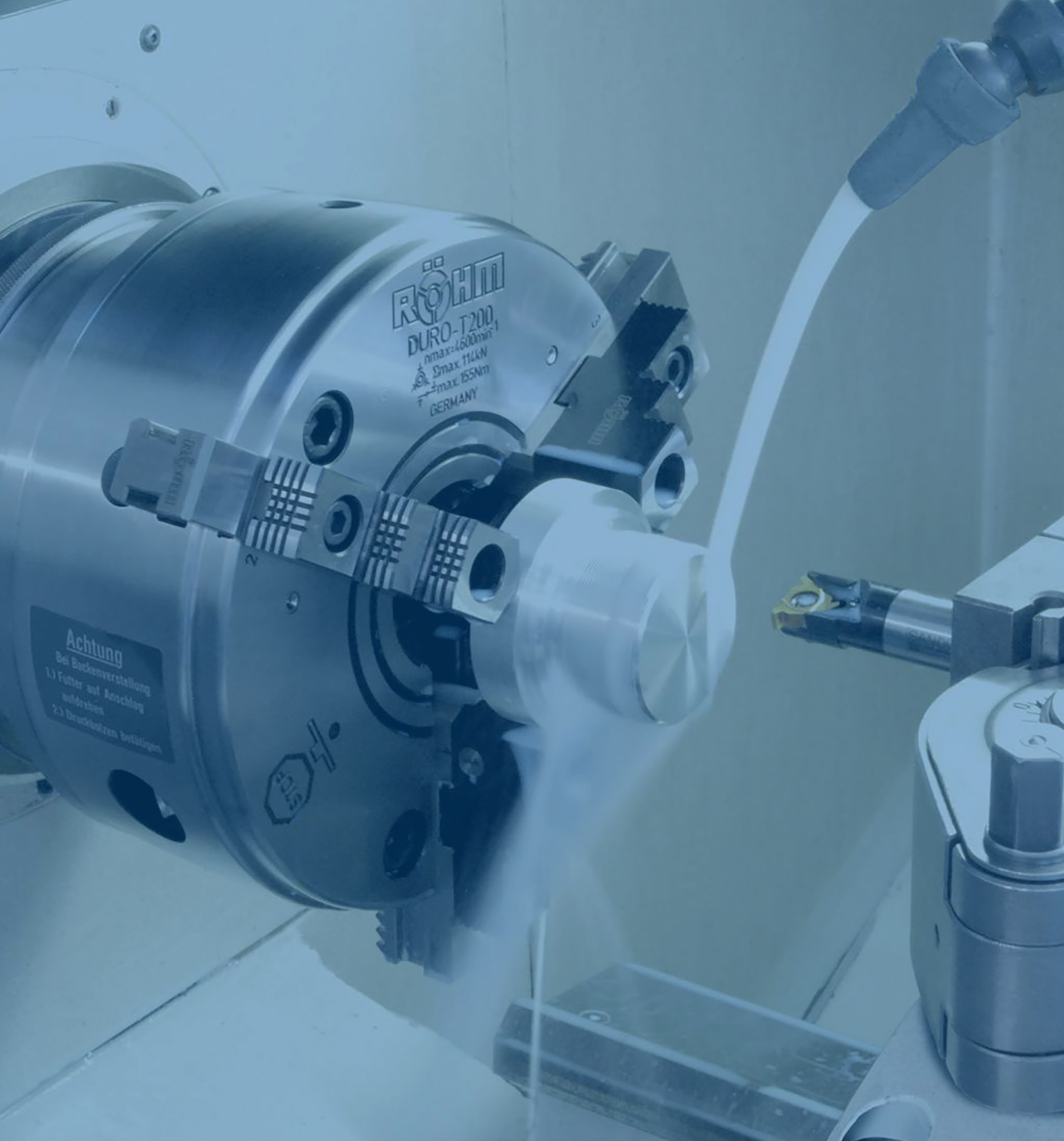


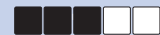
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Operation guide

				
TYPE	DURO-T	DURO-TA	DURO-TA XT	DURO-M
	Key bar chucks with quick jaw change system			Geared scroll chucks
Chuck capacities	3 - 630 mm	3 - 646 mm	8 - 1190 mm	2 - 1224 mm
Mount	Cylindrical centre mount DIN 6350 ISO 702-3 (DIN 55027)	Cylindrical centre mount DIN 6350	Individual	Cylindrical centre mount DIN 6350 DIN 6350 BVV (mounting from front) ISO 702-1 (DIN 55026) ISO 702-2 (DIN 55029) ISO 702-3 (DIN 55027)
Through-hole				
Number of jaws				   
Types of jaws	  	  	  	 
Workpiece	   	   	   	   
Machining	 	 	 	 
Rotating/Stationary	 	 	 	 
Clamping				
Clamping force				
Speed max.				
Precision				
Feature	quick jaw change system	grinding chuck with quick jaw change system	weight reduced	weight reduced and good accessibility
Page	3009	3020	3027	3036

 yes

 3-jaw chuck

 pipe

 flange

 4-jaw chuck

 bar

 asymmetrical workpiece

 disc

Operation guide

				
TYPE	ZS Hi-Tru	ES	KRF	USE - USU
	Geared scroll chucks			Independent chucks
Chuck capacities	2 - 315 mm	3 - 630 mm	2 - 200 mm	20 - 1270 mm
Mount	Cylindrical centre mount DIN 6350	Cylindrical centre mount DIN 6351	Cylindrical centre mount DIN 6350	Cylindrical centre mount ISO 702-2 (DIN 55029) ISO 702-3 (DIN 55027)
Through-hole				
Number of jaws		 	 	
Types of jaws	 			 
Workpiece	   	   	   	   
Machining	 	 		 
Rotating/Stationary	 	 		 
Clamping		 		
Clamping force				
Speed max.				
Precision				
Feature	radial precision adjustment, with special seal for grinding machines	independently adjustable jaws	keyless clamping, specially for measuring and grinding machines	independently adjustable jaws
Page	3048	3069	3074	3084

 inside jaw + outside jaw

 reversible jaw

 rotating machining

 independently adjustable jaws

 base jaw

 length machining

 stationary machining

 base and top jaw

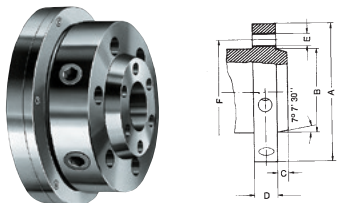
 side machining

 self-centering

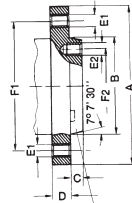
Machine spindle noses for DIN and ASA B 5.9

Machine spindle noses (not included in the scope of delivery)

ISO 702-2 (DIN 55029 and ASA B 5.9 D1)
Camlock fixing (ISO 702-2)



Typ A1-A2, B1-B2



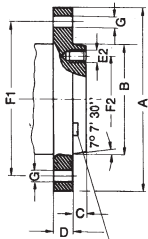
A1: Tapped holes in flange (outer bolt circle) and inner bolt circle. From taper size 4 with driver.

A2: Tapped holes in flange (outer bolt circle) without inner bolt circle.



B1: Through-holes in flange (outer bolt circle), tapped holes in inner bolt circle - from taper size 4 with driver.

B2: Through-holes in flange (outer bolt circle) without inner bolt circle.



* From taper size 4 with driver

Spindle nose size	A	B	C	D	E	F
3	92,1	53,985	11,1	31,8	3x15,1	70,66
4	117,5	63,525	11,1	33,3	3x16,7	82,55
5	146	82,575	12,7	38,1	6x19,8	104,8
6	181	106,390	14,3	44,5	6x23	133,4
8	225,4	139,735	15,9	50,8	6x26,2	171,4
11	298,5	196,885	17,5	60,3	6x31	235
15	403	285,800	19	69,9	6x35,7	330,2
20	546	412,800	21	82,5	6x42,1	463,6

Latest edition of relevant DIN standard applies in each case

Spindle nose size	A	B	C _{0,025}	D	Holes on outer bolt circle (F1)	Outer bolt circle	Holes on inner bolt circle (F2)	Inner bolt circle
A1 (corresponds ISO 702-1)					E1	F1	E2	F2
5	133,4	82,575	14,288	22,2	11x 7/16-14 UNC	104,8	8x 7/16-14 UNC	61,9
6	165,1	106,390	15,875	25,4	11x 1/2-13 UNC	133,4	8x 1/2-13 UNC	82,6
8	209,5	139,735	17,462	28,6	11x 5/8-11 UNC	171,4	8x 5/8-11 UNC	111,1
11	279,4	196,885	19,05	34,9	11x 3/4-10 UNC	235	8x 3/4-10 UNC	165,1
15	381	285,800	20,638	41,3	12x 7/8-9 UNC	330,2	11x 7/8-9 UNC	247,6
20	520	412,800	22,225	47,6	12x 1-8 UNC	463,6	12x 1-8 UNC	368,3

Spindle nose size	A	B	C	D	Holes on outer bolt circle (F1)	Outer bolt circle
A2 (corresponds ISO 702-1)					E1	F1
3	92,1	53,985	11,1	15,9	3x 7/16-14 UNC	70,66
4	108	63,525	11,1	19	11x 7/16-14 UNC	82,55
5	133,4	82,575	12,7	22,2	11x 7/16-14 UNC	104,8
6	165,1	106,390	14,3	25,4	11x 1/2-13 UNC	133,4
8	209,5	139,735	15,9	28,6	11x 5/8-11 UNC	171,4
11	279,4	196,885	17,5	34,9	11x 3/4-10 UNC	235
15	381	285,800	19	41,3	12x 7/8-9 UNC	330,2
20	520	412,800	20,6	47,6	12x 1-8 UNC	463,6

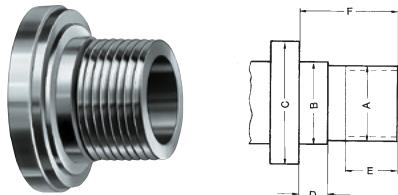
Spindle nose size	A	B	C _{0,025}	D	F1 G	Outer bolt circle	Holes on inner bolt circle (F2)	Inner bolt circle
B1					F1		E2	F2
5	133,4	82,575	14,288	22,2	11x11,9	104,8	8x 7/16-14 UNC	61,9
6	165,1	106,390	15,875	25,4	11x13,5	133,4	8x 1/2-13 UNC	82,6
8	209,5	139,735	17,462	28,6	11x16,7	171,4	8x 5/8-11 UNC	111,1
11	279,4	196,885	19,05	34,9	11x20,2	235	8x 3/4-10 UNC	165,1
15	381	285,800	20,638	41,3	12x23,4	330,2	11x 7/8-9 UNC	247,6
20	520	412,800	22,225	47,6	12x26,6	463,6	12x 1-8 UNC	368,3

Spindle nose size	A	B	C	D	G	Outer bolt circle
B2						F1
3	92,1	53,985	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	285,800	19	41,3	12x23,4	330,2
20	520	412,800	20,6	47,6	12x26,6	463,6

Machine spindle noses for DIN and ASA B 5.9

Machine spindle noses (not included in the scope of delivery)

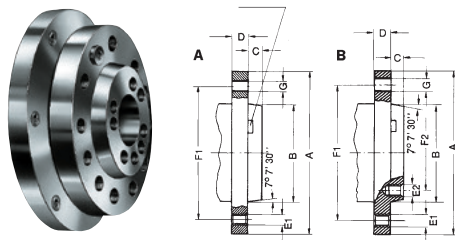
DIN 800, with thread



Mean tol. A	Bg5	Minimum C	D	E	F
M20	21	30	6,3	10	20
M24	25	36	8	12	24
M33	34	50	9	14	30
M39	40	56	10	16	35
M45	46	67	11	18	40
M52	55	80	12	20	45
M60	62	90	14	22	50
M76x6	78	112	16	30	63
M105x6	106	150	20	40	80

DIN 55021

From taper size 4 with driver



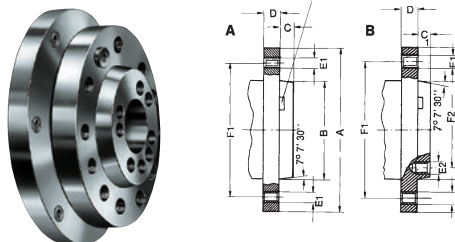
Spindle nose size	A	B	C	D	Holes on outer bolt circle (F1)	Outer bolt circle	Holes on inner bolt circle	Inner bolt circle
3	102	53,985	11	16	3xM10	3x10,5	75	-
4	112	63,525	11	20	3xM10	3x10,5	85	-
5	135	82,575	13	22	7xM10	4x10,5	104,8	8xM10
6	170	106,390	14	25	7xM12	4x13	133,4	8xM12
8	220	139,735	16	28	7xM16	4x17	171,4	8xM16
11	290	196,885	18	35	12xM20	6x21	235	11xM20
15	380	285,800	20	42	12xM24	6x25	330,2	11xM24
20	520	412,800	21	48	12xM24	6x25	463,6	11xM24

Form A: Tapped holes and through-holes in flange (without inner bolt circle)

Form B: Tapped holes and through-holes in flange (outer bolt circle) and tapped holes in inner bolt circle

ISO 702-1 (DIN 55026)

From taper size 4 with driver



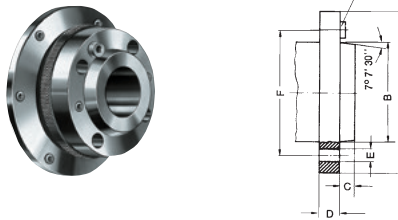
Spindle nose size	A	B	C	C ₁	D	Holes on outer bolt circle	Outer bolt circle	Holes on inner bolt circle	Inner bolt circle
3	92	53,983	11	-	16	3xM10	70,6	-	-
4	108	63,521	11	-	20	11xM10	82,6	-	-
5	133	82,573	13	14,288	22	11xM10	104,8	8xM10	61,9
6	165	106,385	14	15,875	25	11xM12	133,4	8xM12	82,6
8	210	139,731	16	17,462	28	11xM16	171,4	8xM16	111,1
11	280	196,883	18	19,05	35	11xM20	235	8xM20	165,1
15	380	285,791	19	20,638	42	12xM24	330,2	11xM24	247,6
20	520	412,795	21	22,225	48	12xM24	463,6	11xM24	368,3

Form A: Tapped holes in flange (outer bolt circle) without inner bolt circle.

Form B: Tapped holes in flange (outer bolt circle) and in inner bolt circle.

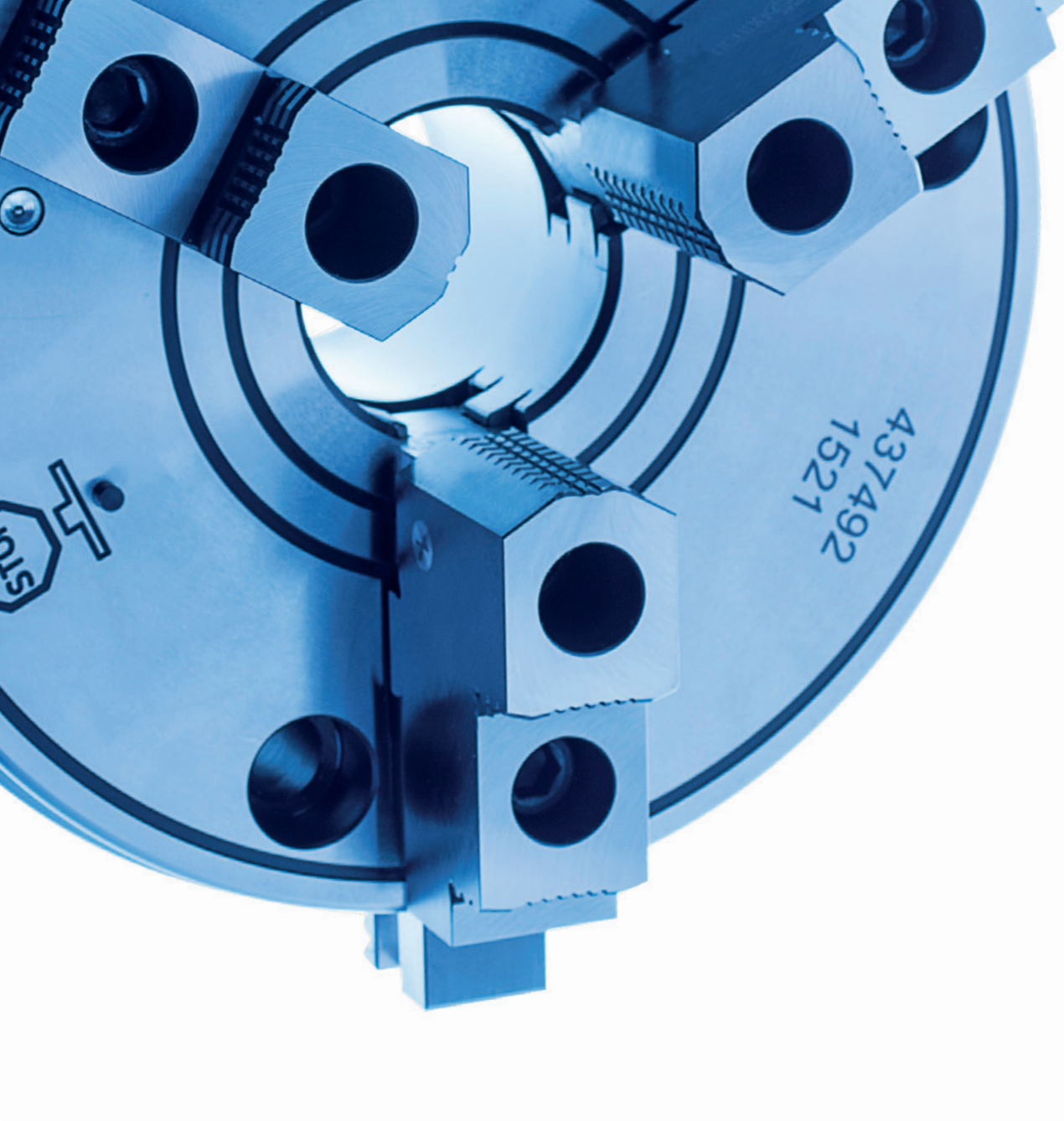
ISO 702-3 (DIN 55027 und 55022)

With bayonet ring fixing (ISO 702/III)



* From taper size 4 with driver

Spindle nose size	A	B	C	D	Number of holes x E	F
3	102	53,985	11	16	3x21	75
4	112	63,525	11	20	3x21	85
5	135	82,575	13	22	4x21	104,8
6	170	106,390	14	25	4x23	133,4
8	220	139,735	16	28	4x29	171,4
11	290	196,885	18	35	6x36	235
15	400	285,800	19	42	6x43	330,2
20	540	412,800	21	48	6x43	463,6



KEY BAR CHUCK WITH QUICK JAW CHANGE SYSTEM

The RÖHM key bar chucks with quick jaw change system are used successfully in areas where extremely high clamping forces, high concentricity and reliable long-term repeatability are required. Thanks to the quick jaw change system, the jaws can be quickly and easily turned, changed or offset over the entire clamping range within a few seconds.

ADVANTAGES AT A GLANCE

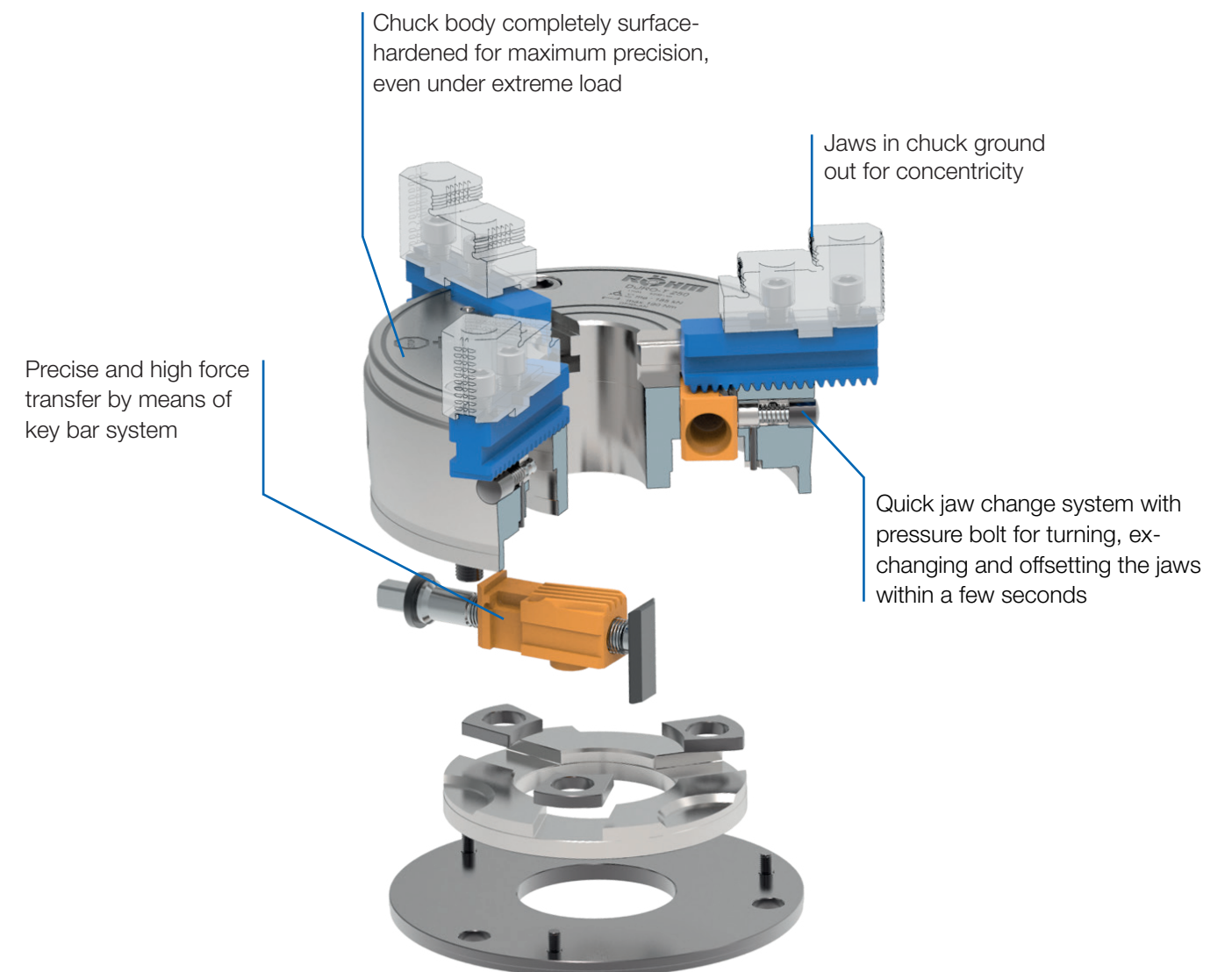
- ④ Maximum clamping forces thanks to direct force transfer via the key bar system
- ④ Maximum concentricity and axial run-out tolerance
- ④ High user-friendliness thanks to quick jaw change system

QUICK JAW CHANGE SYSTEM

The RÖHM key bar chucks with quick jaw change system convince in two ways. On the one hand the jaws can be quickly and easily turned, changed or offset over the entire clamping range within a few seconds. On the other the key bar chucks convince with maximum clamping forces and maximum accuracy thanks to direct force transfer via the key bar system. Large, straight surfaces transmitting the force from the key bar to the jaw teeth guarantee long life and produce a very high clamping force combined with an accuracy which is twice high as required by DIN 6386. The high clamping force is achieved without much physical effort by manually turning the key.



Video DURO-T



DURO-T

The DURO-T key bar chuck guarantees maximum precision, maximum clamping force and is completely balanced ex works.

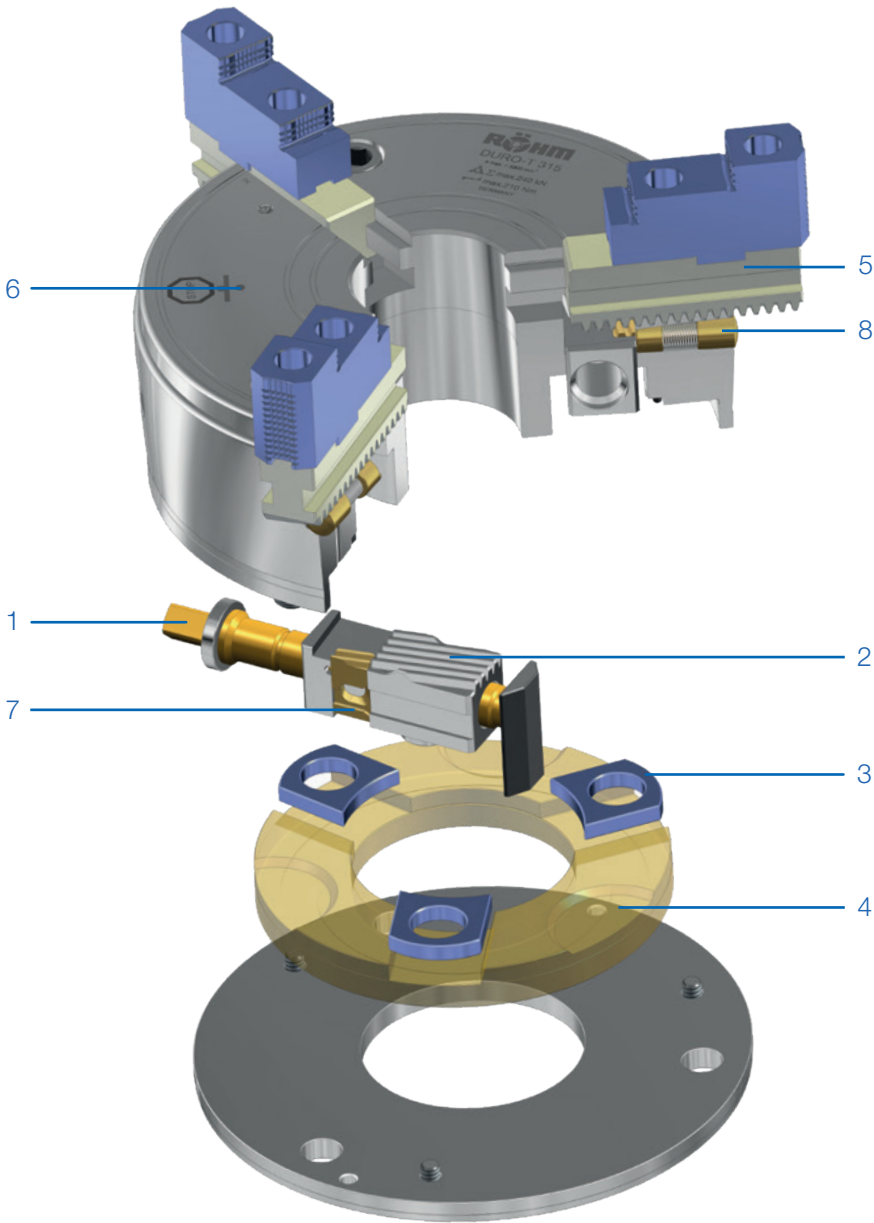
Principle of operation

Thanks to the tangentially arranged threaded spindle (1), the force is transferred via a key bar (2) having an internal thread. The key bar moves the drive ring via a slide (3). Two other slides in the drive ring (4) transfer the forces to the other two key bars. The key bars having an inclined profile engage in the base jaws (5), thereby guaranteeing exact, centric clamping. The jaws can be quickly and easily turned, changed or offset over the entire clamping range within a few seconds. To do this, the key bars must be disengaged by turning the key to the left; the indicator pin (6) will project here. In this position, the jaws are secured against being hurled out in the event the machine spindle is started up unintentionally. Therefore, the gate valve (7) of each jaw must be unlocked via the corresponding pressure bolt (8) on the outer diameter of the chuck.

Large, straight-line force transfer surfaces between the key bar and jaw toothing yield a very high clamping force over a long service life and precision which is twice as high as prescribed by DIN 6386. The high clamping force is achieved without exerting any special amount of force by manually turning the key.

Lubrication

To maintain the clamping force, key bar chucks must be lubricated regularly. You will find corresponding information in the operating instructions which are enclosed with every chuck. For easy maintenance, DURO-T chucks are equipped with three additional grease nipples on the front side.



DURO-T - with quick jaw change system



APPLICATION

Optimized for turning applications, which require extremely high clamping forces, maximum concentricity, as well as reliable long-term repeatability. In combination with a base plate, stationary use on milling machines, dividing units and machining centers.

TYPE

Key bar chuck with quick jaw change system. Guaranteed maximum jaw precision as far as these are only used on the same chuck, and base and top jaws are kept screwed on for recurring work.

CUSTOMER BENEFITS

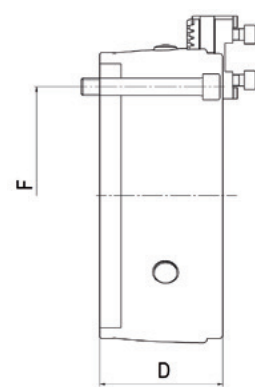
- Maximum clamping force thanks to key bar system
- Concentricity and axial run-out tolerance twice as exact as required in DIN precision class 1
- Very high jaw change repeatability
- Balanced and jaws in chuck ground out for concentricity

TECHNICAL FEATURES

- With jaw safeguard
- Chuck body completely surface-hardened
- Visual marking for quick jaw adjustment
- External shape incl. splash-water edge
- Fastening options for strongly stressed sliding surfaces
- Incl. safety key
- High corrosion protection



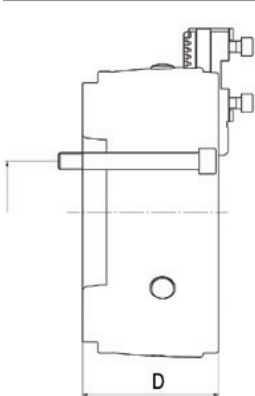
A08
Cylindrical centre mount



Size	Inch	Through-hole mm	With one-piece reversible jaws	With base jaws	With base jaws and reversible top jaws	D mm	F mm	Speed max. min ⁻¹	Max. Torque Nm	Max. total clamping force kN
125	5	32	437475	437482	-	46,5	100	6000	40	23
160	6 1/4	42	437476	437483	437490	63	125	5400	120	73
200	8	52	437477	437484	437491	81	160	4600	155	114
250	10	62	437478	437485	437492	92	200	4200	190	185
315	12 1/2	87	437479	437486	437493	111	250	3300	210	240
400	15 3/4	102	437480	437487	437494	118	315	2200	260	260
500	20	162	437481	437488	437495	118	400	1900	320	290
630	25	252	-	437489	437496	143	520	1100	350	320

At size 630 chuck body without convex outer contours
Further sizes and mountings available on request

A08
ISO 702-1 (DIN 55026), DIN 55021, ASA B 5.9, mounting from front

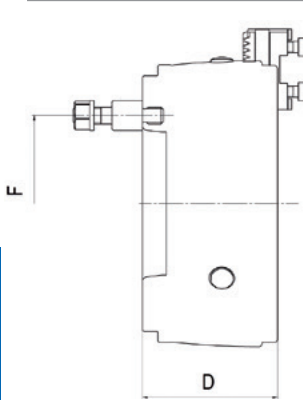


Size	Mount short taper	Through-hole mm	With one-piece reversible jaws	With base jaws	With base jaws and reversible top jaws	D mm	F mm	Speed max. min ⁻¹	Max. Torque Nm	Max. total clamping force kN
160	4	42	437570	437580	437591	76	82,62	5400	120	73
160	5	42	437571	437581	437592	79	104,8	5400	120	73
200	5	52	437572	437582	437593	93	104,8	4600	155	114
200	6	52	437573	437583	437594	97	133,4	4600	155	114
250	6	62	437574	437584	437595	108	133,4	4200	190	185
315	6	87	437575	437585	437596	124	133,4	3300	210	240
315	8	87	437576	437586	437597	130	171,4	3300	210	240
400	8	102	437577	437587	437598	135	171,4	2200	260	260
500	11	162	437578	437588	437599	138	235	1900	320	290
630	15	252	-	437590 ¹⁾	437601	167	330,2	1100	350	320

¹⁾ By conserving the precision
At size 630 chuck body without convex outer contours
Further sizes and mountings available on request

DURO-T - with quick jaw change system

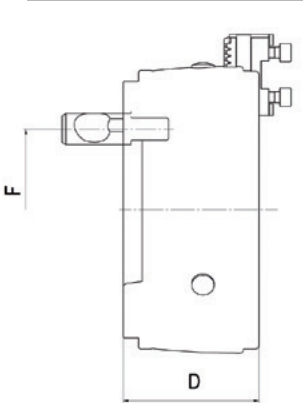
A08
ISO 702-3 (DIN 55027), with studs and locknuts



Size	Mount short taper	Through-hole mm	With one-piece reversible jaws	With base jaws	With base jaws and reversible top jaws	D mm	F mm	Speed max. min ⁻¹	Max. Torque Nm	Max. total clamping force kN
125	5	32	437499	437523	-	67	104,8	6000	40	23
160	5	42	437501	437525	437548	78	104,8	5400	120	73
160	6	42	437502	437526	437549	85	133,4	5400	120	73
200	5	52	437504	437528	437551	96	104,8	4600	155	114
200	6	52	437505	437529	437552	97	133,4	4600	155	114
250	6	62	437509	437533	437556	108	133,4	4200	190	185
250	8	62	437510	437534	437557	110	171,4	4200	190	185
315	8	87	437512	437536	437559	129	171,4	3300	210	240
315	11	87	437513	437537	437560	131	235	3300	210	240
400	8	102	437515	437539	437562	138	171,4	2200	260	260
400	11	102	437516	437540	437563	138	235	2200	260	260
500	11	162	437519	437543	437566	156	235	1900	320	290
500	15	162	437520	437544	437567	163	330,2	1900	320	290
630	11	192	-	437545 ¹⁾	437568	165	235	1100	350	320
630	15	252	-	437546 ¹⁾	437569	167	330,2	1100	350	320

¹⁾ By conserving the precision
At size 630 chuck body without convex outer contours
Further mountings available on request.

A08
ISO 702-2 (DIN 55029), stud for Camlock



Size	Mount short taper	Through-hole mm	With one-piece reversible jaws	With base jaws	With base jaws and reversible top jaws	D mm	F mm	Speed max. min ⁻¹	Max. Torque Nm	Max. total clamping force kN
125	3	32	437602	437625	-	67	70,66	6000	40	23
125	4	32	437603	437626	-	68	82,6	6000	40	23
160	4	42	437604	437627	437650	83,5	82,6	5400	120	73
160	5	42	437605	437628	437651	87	104,8	5400	120	73
160	6	42	437606	437629	437652	104	133,4	5400	120	73
200	4	52	437607	437630	437653	97,5	82,6	4600	155	114
200	5	52	437608	437631	437654	101	104,8	4600	155	114
200	6	52	437609	437632	437655	106	133,4	4600	155	114
200	8	52	437610	437633	437656	125	171,4	4600	155	114
250	4	60	437611	437634	437657	118,5	82,6	4200	190	185
250	5	62	437612	437635	437658	112	104,8	4200	190	185
250	6	62	437613	437636	437659	117	133,4	4200	190	185
250	8	62	437614	437637	437660	120	171,4	4200	190	185
315	6	87	437615	437638	437661	145	133,4	3300	210	240
315	8	87	437616	437639	437662	136	171,4	3300	210	240
315	11	87	437617	437640	437663	143	235	3300	210	240
400	6	102	437618	437641	437664	153	133,4	2200	260	260
400	8	102	437619	437642	437665	141	171,4	2200	260	260
400	11	102	437620	437643	437666	148	235	2200	260	260
400	15	102	437621	437644	437667	168	330,2	2200	260	260
500	8	135	437622	437645	437668	143	171,4	1900	320	290
500	11	162	437623	437646	437669	148	235	1900	320	290
500	15	162	437624	437647	437670	153	330,2	1900	320	290
630	11	192	-	437648 ¹⁾	437671	170	235	1100	350	320
630	15	252	-	437649 ¹⁾	437672	175	330,2	1100	350	320

¹⁾ By conserving the precision
At size 630 chuck body without convex outer contours

Jaws DURO-T

A28
One-piece jaw EB, 3-jaw set, diagonally toothing, hardened



Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
212121	125	3	set	50	34	14
094000	160	3	set	77,7	45	20
094001	200	3	set	94,7	60	22
094002	250	3	set	114	70	26
094003	315	3	set	130	79	32
094043	400/500	3	set	167	93	45

Additionally or later applied, hardened stepped jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.

A28
Unstepped jaw BL, 3-jaw set, diagonally toothing, unstepped, soft, material 16MnCr5



Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
304864	125	3	set	53	34	14
241699	160	3	set	84,4	45	20
249678	200	3	set	98,4	60	22
249679	250	3	set	118,7	70	26
249680	315	3	set	136,6	79	32
249681	400/500	3	set	173,6	93	45

A28
Reversible top jaw UB, 3-jaw set, hardened tongue and groove for external and internal clamping, material 16 MnCr5



Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
094012	160	3	set	61,5	32,5	20,4
094013	200	3	set	70,5	38	24,4
094014	250	3	set	92	50	34,4
094015	315	3	set	107	56	35,7
094045	400/500	3	set	130	72	50,4
140715	630	3	set	185	102	68

Additionally or later applied hardened jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.

A28
Unstepped top jaw AB, 3-jaw set, standard design, soft, material 16 MnCr5



Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
212123	125	3	set	55	28,8	20,7
094008	160	3	set	85	36,5	20,3
094009	200	3	set	105	40	22
094010	250	3	set	125	50	30
094011	315	3	set	145	50	34,3
094046	400/500	3	set	180	73	50,5
140716	630	3	set	260	102	68

A28
Unstepped top jaw AB, 3-jaw set, extendend design, soft, material 16MnCr5



Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
137055	160	3	set	85	42,5	24,4
137056	200	3	set	105	51	34,3
137057	250	3	set	125	75	50,5
137058	315	3	set	145	74	50,5

Jaws DURO-T

A28
Base jaw GB, 3-jaw set, diagonally toothing, with mounting bolts



Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw width mm
212119	125	3	set	47	14
094004	160	3	set	74	20
094005	200	3	set	90	22
094006	250	3	set	110	26
094007	315	3	set	125	32
094044	400/500	3	set	160	45
140194	630	3	set	230	65

C 21
Reversible claw-type top jaws, standard design, tongue and groove, large clamping range, 1 piece, hardened



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137060	160	66	37,5	24
137119	400/500	124	62	50
151289	630	144	78	70

C 21
Reversible claw-type top jaws, standard design, tongue and groove, small clamping range, 1 piece, hardened



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137061	160	66	37,5	20
137064	200	81	43	24
137108	250	90	55	34
137114	315	100	62	34
137120	400/500	124	62	50

C 21
Reversible claw-type top jaws, standard design, tongue and groove, medium clamping range, 1 piece, hardened



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137062	160	56	37,5	20
137065	200	66	43	24
137109	250	72	55	34
137115	315	86	62	34
137121	400/500	100	62	50

C 21
Reversible claw-type top jaws, large design, tongue and groove, small clamping range, 1 piece, hardened



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137066	160/200	79	43	34
137110	250	80	55	50
137116	315	93	62	50

Jaws DURO-T

C 21
Reversible claw-type top jaws, large design, tongue and groove, large clamping range, 1 piece, hardened



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137067	160/200	81	43	34
137111	250	90	55	50
137117	315	106	62	50

C 21
Reversible claw-type top jaws, large design, tongue and groove, medium clamping range, 1 piece, hardened



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137068	160/200	66	43	34
137112	250	72	55	50
137118	315	86	62	50

C 21
Draw-down jaws, for interchangeable clamping inserts, diagonally toothing, 1 piece, without clamping inserts



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
141037	160	84,4	43,5	20
141039	200	98,4	47,5	22
141041	250	118,7	58,5	26
141043	315	136,4	63,9	32
141045	400/500	173,6	73,4	45

C 21
Draw-down jaws, additional clamping range, for interchangeable clamping inserts, diagonally toothing, 1 piece, without clamping inserts



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
141038	160	84,4	43,5	20
141040	200	98,4	47,5	22
141042	250	118,7	58,5	26
141044	315	136,4	63,9	32
141046	400	173,6	73,4	45
141048	500	173,6	73,4	45

Jaws DURO-T

C 15
Interchangeable clamping inserts, 1 piece, with claws

Item no.	Chuck Size
141049	160/200
141052	250/315
141055	400/500/630



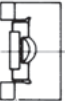
C 15
Interchangeable clamping inserts, 1 piece, with serrated toothing

Item no.	Chuck Size
141050	160/200
141053	250/315
141056	400/500



C 15
Interchangeable clamping inserts, 1 piece, with heat treatable surface

Item no.	Chuck Size
141051	160/200
141054	250/315
141057	400/500



C15
Jaw mounting bolt, piece

Item no.	Size	Thread	Contents of delivery
243893	125	M6x10	piece
200182	160/200	M8x1x22	piece
200183	250	M12x1,5x30	piece
202402	315	M12x1,5x35	piece
227618	400/500	M16x1,5x40	piece
249388	630	M20x50	piece



Accessories DURO-T

A08 **Base plate with fixing slots**
Complete with mounting screws and fixed T-slot nuts.
Other sizes available on request.

Item no.	Size
143163	160
143165	200
143167	250



A08 **Key**

Item no.	Size	Square	L mm
212124	125	8	85
094016	160	10	140
094017	200	12	160
094018	250	14	220
094019	315	17	230
094047	500	19	250
332938	630	24	410

Only for stationary used chucks

A08 **Safety key**

Item no.	Size	Square	L mm
242172	125	8	85
242173	160	10	140
242174	200	12	160
242175	250	14	220
242176	315	17	230
242177	500	19	250
332939	630	24	410

Corresponding with DIN 1550 for rotating chucks

A08 **Torque wrench**

Item no.	Torque Nm	Length mm	Output	Working accuracy
10004116	20-120	435	12,7=1/2"	3%
10004117	60-320	659	12,7=1/2"	3%



A08 **Chip guard set**

Item no.	Size	Contents of delivery
212122	125	set
236439	160	set
236440	200	set
236441	250	set
236442	315	set
236443	500	set



A08 **Safety adapter**

Item no.	Size	Square	Length mm	Mount
1333585	125	8	85	1/2"
1333587	160	10	120	1/2"
1293349	200	12	132	1/2"
1129759	250	14	186	1/2"
1129449	315	17	192	1/2"
1111583	400/500	19	220	1/2"
1162787	630	24	250	1/2"



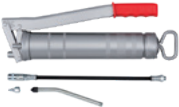
A08 **Special grease F80 for lathe chucks**
for lubrication and conservation of chucking power

Item no.	Design	Contents
308555	Cartridge (DIN 1284) Ø 53.5x235mm	0,5 kg
028975	Tin	1 kg

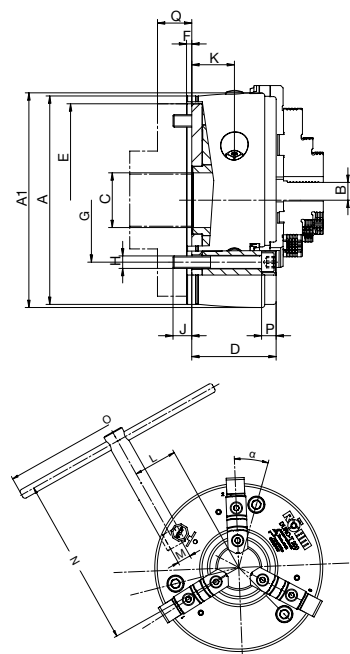


C15 **Grease gun DIN1283**

Item no.	Connec- tion	Contents of delivery
329093	M10x1	150 mm nozzle tube bent, needlepoint mouthpiece, top mouthpiece, 300 mm high pressure hose with 4 jaw hydraulics cross mouthpiece



Technical Data DURO-T



Chuck size A		125	160	200	250	315	400	500	630
Outer diameter	A1	128	164	206	256	322	407	507	630
Jaw movement	B	4,8	6,2	6,8	8	10,2	12,5	12,5	14
Bore	C	32	42	52	62	87	102	162	252
Bore cab be enlarged	C max.	35	45	55	75	102	130	180	270
	D	46,5	63	81	92	111	118	118	143
	E ^{H6}	115	145	185	235	300	380	460	580
	F	4	5	5	6	6	6	6	6
	G	100	125	160	200	250	315	400	520
	H	3xM8	3xM10	3xM12	3xM16	3xM20	3xM24	3xM24	3xM24
	J	12	15	18	25	30	37	37	37
	K	22,5	31,5	43	47	59	57,7	57,5	72
	L	32,5	42	53,5	66,5	86	110	152,5	196
	M	SW8	SW10	SW12	SW14	SW17	SW19	SW19	SW24
	N	117	182	211	284	309	359	356	570
	O	180	210	270	450	500	600	600	600
	P	8,5	13	14	17	21	25	25	29
	Q	17	30	30	35	35	40	45	55
Min. thickness of flange									
Moment of inertia GD2 ¹⁾	kgm ²	0,01	0,03	0,10	0,29	0,87	2,37	5,78	17,04
	α	21° 35'	22°	18°	19°	17°	20°	42°	69° 30'
approx. kg	kg	4,0	9,3	18,6	34,5	64	112	166	300

1) The moment of inertia was measured with base jaws but without top jaws or back plate
The bore could be enlarged (measure C, at surcharge)
Enlarged bore max.

Max. permissible speed

The maximum permissible speed has been fixed so that 1/3 of the gripping force is still available as residual gripping force if the maximum gripping is applied and the chuck is fitted with its heaviest jaws. The jaws may not project beyond the outside diameter of the chuck. The chuck must be in perfect condition. The specification DIN 6386 Part 1 shall be observed.

Chuck size		125	160	200	250	315	400	500	630
Max. speed	min ⁻¹	6000	5400	4600	4200	3300	2200	1900	1100

Gripping force

The gripping force is the sum total of all jaw forces acting radially on the stationary workpiece.

The specified gripping forces are standard values.

They apply to chucks in a perfect condition which have been lubricated with RÖHM grease F79 and F80.

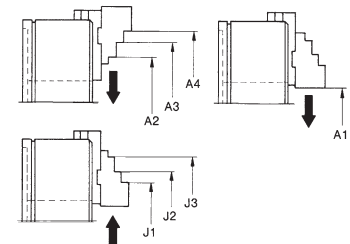
Chuck size		125	160	200	250	315	400	500	630
Torque applied on key 1)	Nm	10	40	60	70	80	90	100	100
Total gripping force 1)	kN	8,5	30	48	66	80	95	102	102
Torque applied on key	Nm	40	120	155	190	210	260	320	350
Max. total gripping force	kN	23	73	114	185	240	260	290	320

1) Maintaining the accuracy

At this torque the clamping jaws have been ground at the factory; for testing the chuck must be clamped with this torque

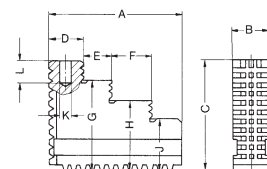
Chuck capacities of jaw steps

Chuck size		125	160	200	250	315	400	500	630
External chucking	A1	3-30	5-51	7-70	8-97	12-131	16-168	40-256	20-322
	A2	31-65	45-91	58-123	82-172	93-216	119-278	167-360	200-490
	A3	63-97	89-135	114-179	-	-	-	-	-
	A4	95-129	115-161	142-207	163-253	201-323	260-413	308-501	360-650
Internal chucking	J1	26-59	67-105	71-131	99-182	102-213	120-272	166-360	184-489
	J2	57-91	93-132	99-159	-	-	-	-	-
	J3	89-123	135-174	154-214	178-261	207-319	260-412	306-500	341-646

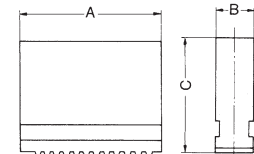


Jaw dimensions DURO-T

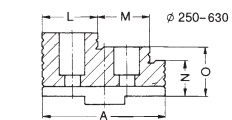
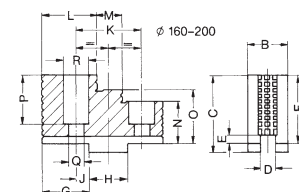
Reversible one-piece jaw **EB**,
hardened and ground,
jaw steps not ground



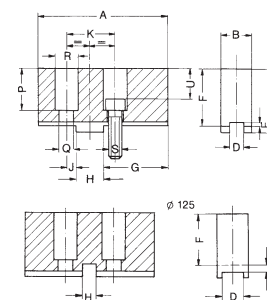
Block jaw **BL**, unstepped, soft, thread
and jaw guides hardened and ground



Reversible top jaw **UB**,
completely hardened, cross tenon ground,
jaw steps not ground

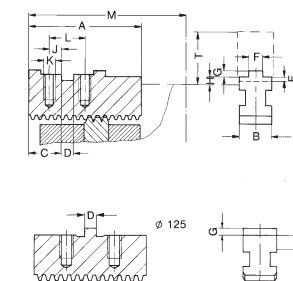


Unstepped soft top jaw **AB**,
for turning out special chucking diameters



Dimensions for extendend design

Base jaws **GB**,
hardened and ground



Chuck size	125	160	200	250	315	400+500
A	50	77,7	94,7	114	130	167
B	14	20	22	26	32	45
C	34	45	60	70	79	93
D	10,7	20,6	23	41,5	40,2	50,5
E	16	18,9	19,5	40,3	54	71
F	16	22	28	-	-	-
G	29	37,5	50	56	64	73
H	24	30	40	-	-	-
J	19	22,5	30	42	49	53
K	-	8	10	13	13	20
L	-	16	15	19,5	19,5	30
Jaw approx. kg	0,400	0,500	0,635	1,135	1,835	3,665

Chuck size	125	160	200	250	315	400+500
A	53	84,4	98,4	118,7	136,6	173,6
B	14	20	22	26	32	45
C	34	45	60	70	79	93
Jaw approx. kg	0,435	0,500	0,900	1,535	2,400	5

Chuck size	160	200	250	315	400+500	630
A	61,5	70,5	92	107	130	185
B	20,4	24,4	34,4	35,7	50,4	68
C	37	43	55	62	79	110
D	8	10	12	12	18	24
E	3	3,5	3,5	3,5	4,5	4,5
F	32,5	38	50	56	72	102
G	22,5	25,5	30	35,5	41,4	59
H	18	20	20	26	30	40
J	7	10	10	14	15	21
K	32	40	40	54	60	82
L	26,5	28,5	41	40	51	80
M	13	14	40,5	54	71	80
N	17,5	18	22	26	32	42
O	25	28	36	41	52	72
P	23,5	29	39	40	57	82
Q	9	9	14	14	18	22
R	15	15	20	20	26	33
T ¹⁾	38,5	45	57	63,6	80,6	114
Jaw approx. kg	0,200	0,335	0,800	1,135	2,535	6,350

1) Dimension marked on base jaw

Chuck size	125	160		200		250		315		400+500	630
A	55	85	85	105	105	125	125	145	145	180	260
B	20,7	20,3	24,4	22	34,3	30,4	50,5	34,3	50,5	50,5	68
C	31,3	41	47	45	56	55	80	56	80	80	110
D	14	8	8	10	10	12	12	12	12	18	24
E	3,3	3	3	3,5	3,5	3,5	3,5	3,5	3,5	4,5	4,5
F	28,8	36,5	42,5	40	51	50	75	50	74	73	102
G	25	42	42	50	50	70	70	74	74	100	150
H	5	18	18	20	20	20	20	26	26	30	40
J	7,5	7	7	10	10	10	10	14	14	15	21
K	20	32	32	40	40	40	40	54	54	60	82
P	24	27,5	33,5	31	42	39	54	34	48	58	83
Q	6,5	9	9	9	9	14	14	14	14	18	22
R	11	15	15	15	15	20	20	20	20	26	33
S	M6	M8x1	M8x1	M8x1	M8x1	M12x1,5	M12x1,5	M12x1,5	M12x1,5	M16x1,5	M20
T ¹⁾	32	42,5	48,5	47	58	57	72	57,6	71,6	81,6	114
U	18	19,5	25,5	23	34	27	42	22	36	42	63
Jaw approx. kg	0,200	0,435	0,600	0,735	1,400	1,500	3,700	2,265	4,800	4,500	13,350

1) Dimension marked on base jaw

Chuck size	125	160	200	250	315	400+500	630
A	47	74	90	110	125	160	230
B	14	20	22	26	32	45	65
C	21	19	23	26	30	35	52
D	5	18	20	20	26	30	40
E	-	5	5,5	5,5	6,5	7,5	9
F	-	8	10	12	12	18	24
G	2,8	2,5	3	3	3	4	4
H	3,55	6	7	7	7,6	8,6	12
J	7,5	7	10	10	14	15	21
K	M6	M8x1	M8x1	M12x1,5	M12x1,5	M16x1,5	M20
L	20	32	40	40	54	60	82
M	72	103	129	163	196	250 294	399
Jaw approx. kg	0,200	0,265	0,365	0,700	1,065	2,350	5,665

Chucking capacities DURO-T

Reversible claw-type top
jaws KB, standard design

	Reversible claw-type top jaw, large clamping range			
Chuck size	160	400	500	630
Item no.	137060	137119	137119	151289
Capacities external Ø min. - max.	142,5 - 187,5	314 - 446	311 - 534	391 - 670
Capacities internal Ø min. - max.	22,5 - 67,5	99 - 231	95 - 317	176 - 456
Interfering contour	224	528	592	800

	Reversible claw-type top jaw, small clamping range					
Chuck size	160	200	250	315	400	500
Item no.	137061	137064	137108	137114	137120	137120
Capacities external Ø min. - max.	37,5 - 82,5	56 - 116	90 - 170	82 - 210	142 - 274	139 - 360
Capacities internal Ø min. - max.	133 - 178	160 - 220	177 - 257	242 - 370	301 - 433	266 - 488
Interfering contour	209	264	330	446	535	592

	Reversible claw-type top jaw, medium clamping range					
Chuck size	160	200	250	315	400	500
Item no.	136062	137065	137109	137115	137121	137121
Capacities external Ø min. - max.	103 - 148	117 - 181	167 - 248	178 - 306	270 - 402	267 - 489
Capacities internal Ø min. - max.	71 - 116	91 - 155	100 - 184	97 - 225	142 - 274	139 - 361
Interfering contour	209	264	330	396	504	592

Notes

DURO-TA - sealed design



APPLICATION

Specially for grinding machines.
Optimized for extremely high clamping forces, maximum concentricity, as well as reliable long-term repeatability.

TYPE

Key bar chuck with quick jaw change system.
Guaranteed maximum jaw precision as far as these are only used on the same chuck, and base and top jaws are kept screwed on for recurring work.

CUSTOMER BENEFITS

- Maximum clamping force thanks to key bar system
- With cover for protection against dust on the face
- Very high jaw change repeatability

TECHNICAL FEATURES

- With jaw safeguard
- Chuck body completely surface-hardened
- Visual marking for quick jaw adjustment
- External shape incl. splash-water edge
- Fastening options for strongly stressed sliding surfaces
- Incl. safety key
- High corrosion protection



A08
Cylindrical centre mount

Size	Inch	With base jaws	With inside and outside jaw	D mm	Speed max. min ⁻¹	Max. Torque Nm	Max. total clamping force kN
160	6 1/4	439606	439605	63	5400	120	73
200	8	439608	439607	81	4600	155	114
250	10	439610	439609	92	4200	190	185

Further sizes and mountings available on request

Jaws DURO-TA

A28
Outside jaw DB, set, inward stepped jaw, hardened

Item no.	Chuck Size	Contents of delivery	Jaw width mm
329041	160	set	20
329042	200	set	22
329043	250	set	26

Additionally or later applied, hardened stepped jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.

A28
Inside jaw BB, set, outward stepped jaw, hardened

Item no.	Chuck Size	Contents of delivery	Jaw width mm
329038	160	set	20
329039	200	set	22
329040	250	set	26

Additionally or later applied, hardened stepped jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.

A28
Unstepped top jaw AB, 3-jaw set, soft, material 16MnCr5

Item no.	Chuck Size	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
329044	160	set	90	36,5	20,3
329045	200	set	100	40	22
094010	250	set	125	50	30

A28
Base jaw GB, 3-jaw set, hardened, with mounting bolts

Item no.	Chuck Size	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
329047	160	set	74	8	20
329048	200	set	90	10	22
329049	250	set	110	12	26

C15
Jaw mounting bolt, piece

Item no.	Size	Thread	Contents of delivery
200182	160/200	M8x1x22	piece
200183	250	M12x,5x30	piece

Accessories DURO-TA

A08 Base plate with fixing slots

Complete with mounting screws and fixed T-slot nuts.
Other sizes available on request.

Item no.	Size
143163	160
143165	200
143167	250

A08 Safety key

Item no.	Size	Square	L mm
242173	160	10	140
242174	200	12	160
242175	250	14	220

Corresponding with DIN 1550 for rotating chucks

A08 Chip guard set

Item no.	Size	Contents of delivery
236439	160	set
236440	200	set
236441	250	set

A08 Special grease F80 for lathe chucks

For lubrication and conservation of chucking power

Item no.	Design	Contents
308555	Cartridge (DIN 1284) Ø 53.5x235mm	0,5 kg
028975	Tin	1 kg

A08 Key

Item no.	Size	Square	L mm
094016	160	10	140
094017	200	12	160
094018	250	14	220

Only for stationary used chucks

A08 Torque wrench

Item no.	Torque Nm	Length mm	Output	Working accuracy
10004116	20-120	435	12,7=1/2"	3%
10004117	60-320	659	12,7=1/2"	3%

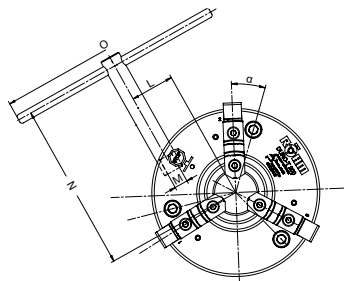
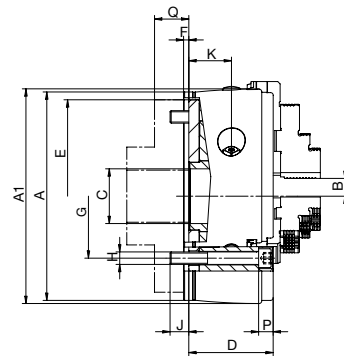
A08 Safety adapter

Item no.	Size	Square	Length mm	Mount
1333587	160	10	120	1/2"
1293349	200	12	132	1/2"
1129759	250	14	186	1/2"

C15 Grease gun DIN1283

Item no.	Connec- tion	Contents of delivery
329093	M10x1	150 mm nozzle tube bent, needlepoint mouthpiece, top mouthpiece, 300 mm high pressure hose with 4 jaw hydraulics cross mouthpiece

Technical data DURO-TA



Chuck size		160	200	250
Outer diameter	A	160	206	255
Jaw movement	B	6,2	6,8	8
Bore	C	42	52	62
Bore can be enlarged	C max.	45	55	75
D	63	81	92	
E ^{H6}	145	185	235	
F	5	5	6	
G	125	160	200	
H	3xM10	3xM12	3xM16	
J	15	18	25	
K	31,5	43	47	
L	42	53,5	66,5	
M	SW10	SW12	SW14	
N	182	211	284	
O	210	270	450	
P	13	14	17	
Q	30	30	35	
Moment of inertia ¹⁾	kgm ²	0,03	0,10	0,29
α	22°	18°	19°	
Weight approx	kg	9,5	20°	35

1) The moment of inertia was measured with base jaws but without top jaws or back plate

The bore could be enlarged (measure C, at surcharge)

Enlarged bore max.

Max. permissible speed

The maximum permissible speed has been fixed so that 1/3 of the gripping force is still available as residual gripping force if the maximum gripping is applied and the chuck is fitted with its heaviest jaws. The jaws may not project beyond the outside diameter of the chuck. The chuck must be in perfect condition. The specification DIN 6386 Part 1 shall be observed.

Chuck size		160	200	250
Max. speed	min ⁻¹	5400	4600	4200

Gripping force

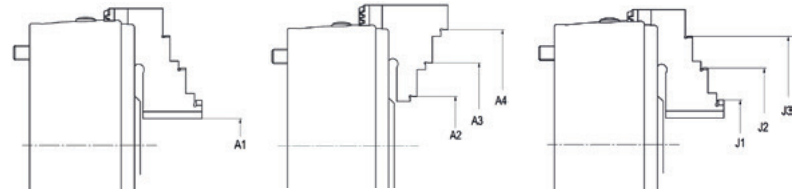
The gripping force is the sum total of all jaw forces acting radially on the stationary workpiece. The specified gripping forces are standard values. They apply to chucks in a perfect condition which have been lubricated with RÖHM grease F79 and F80.

Chuck size		160	200	250
Torque applied on key in 1)	Nm	20	30	35
Total gripping force 1)	kN	15	24	33
Torque applied on key in	Nm	120	155	190
Max. total gripping force	kN	73	114	185

1) Maintaining the accuracy

Chucking capacities of jaw steps

Chuck size		160	200	250
External chucking	Jaw position.	A1 5-51 A2 45-91 A3 89-135 A4 115-161	7-70 58-123 114-179 142-207	8-97 82-172 - 163-253
Internal chucking	J1 67-105 J2 93-132 J3 135-174	71-131 99-159 154-214	99-182 - 178-261	

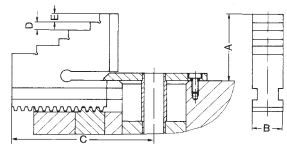


Chuck dimensions DURO-TA - Main dimensions (other dimensions on the table on the top)

Chuck size		160	200	250
Outer diameter	A	160	206	255
External chucking with BB-jaws		3-46	3-60	5-66
External chucking with DB-jaws		23-160	32-200	65-243
Internal chucking with BB jaws		28-156	32-195	47-225
Central bor for coolant	B	13	13	13
	C	70	85	92
	D	5	6	5

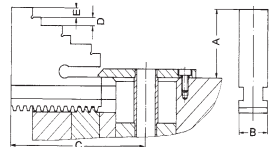
Jaw dimensions and chucking capacity DURO-TA

Notes



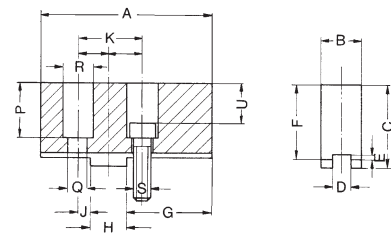
Outward stepped
jaw **BB**

Chuck size	160	200	250
A	46	55	60
B	20	22	26
C max.	95	120	143,5
C min.	72	91	113
D	5	7	6
E	6	6	8
Jaw approx. kg	0,465	0,643	1,065



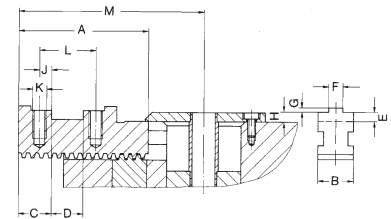
Inward stepped
jaw **DB**

Chuck size	160	200	250
A	43	50	50
B	20	22	26
C max.	95	120	143,5
C min.	72	91	113
D	5	7	6
E	6	6	8
Jaw approx. kg	0,435	0,600	1,065



Unstepped soft top
jaw **AB**

Chuck size	160	200	250
A	90	100	125
B	20,3	22	30
C	41	45	55
D	8	10	12
E	3	3,5	3,5
F	36,5	40	50
G	55	61	70
H	18	20	20
J	6	6	10
K	30	32	40
P	27,5	31	39
Q	9	9	14
R	15	15	20
S	M8x1	M8x1	M12x1,5
U	19,5	23	27
Jaw approx. kg	0,435	0,800	1,500



Base jaw **GB**

Chuck size	160	200	250
A	74	90	110
B	20	22	26
C	17	19	26
D	18	20	20
E	5	5,5	5,5
F	8	10	12
G	2,5	7	7
H	6	20	20
J	7	6	10
K	M8x1	M8x1	M12x1,5
L	32	32	40
M max.	105	127	148,5
M min.	91	103	125
Jaw approx. kg	0,335	0,365	0,700

DURO-TA XT

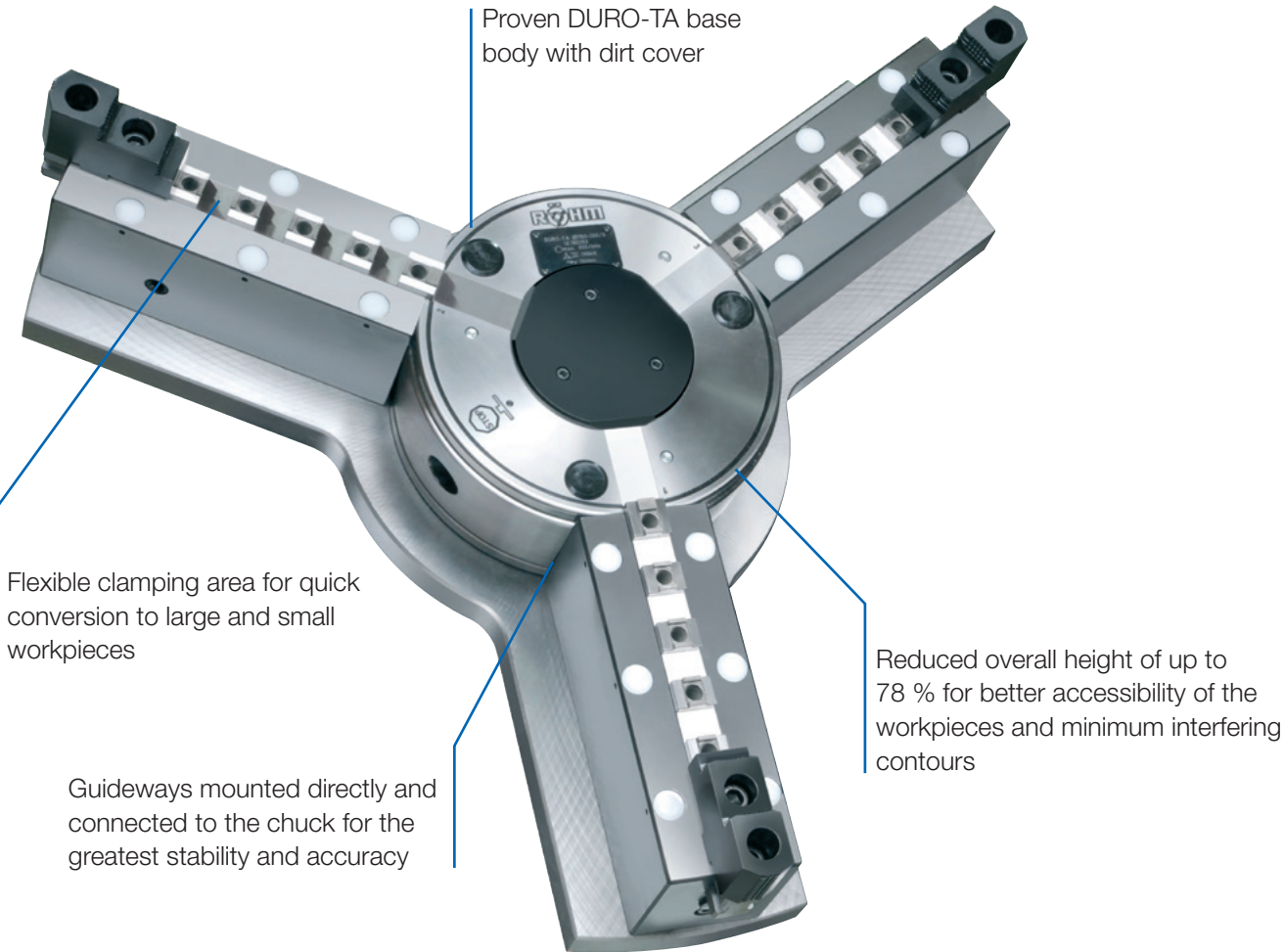
Equipped with extended and easy to assemble guideways the new lightweight DURO-TA XT is convincing with a flexible clamping area for machining large and small workpieces. Weight-reducing by up to 75 % makes maximum utilisation of the machine’s potential possible.

Guideways

The new DURO-TA XT has an innovative concept for guideways that guarantees flexible and weight-reducing use. In contrast to other large chucks, the DURO-TA XT is up to 75 % lighter and that way makes maximum utilisation of the machine’s potential possible and clamping of higher workpiece weights. Through the extended and easy to assemble guideways, the clamping area can be set flexibly and hence converted quickly to large and small workpieces. Through the direct mount on the base body, the guideways guarantee extremely high rigidity, stability and protection against penetration by dirt and dust.

Principle of operation

Thanks to the tangentially arranged threaded spindle, the force is transferred via a key bar having an internal thread. The key bar moves the drive ring via a slide. Two other slides in the drive ring transfer the forces to the other two key bars. The key bars having an inclined profile engage in the base jaws, thereby guaranteeing exact, centric clamping.



DURO-TA XT - with removable guideways



APPLICATION

On turning and milling machines.

TYPE

Key bar chuck (DURO-TA) with removable guideways.

CUSTOMER BENEFITS

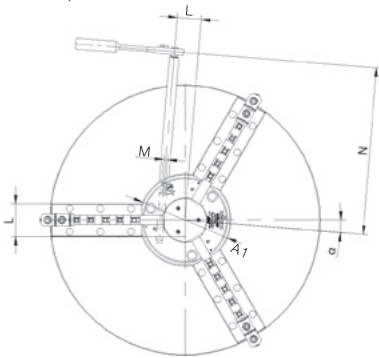
- Weight reduction by up to 75%
- Maximum flexibility and faster retrofitting
- Innovative design with minimum interference contour and maximum stability

TECHNICAL FEATURES

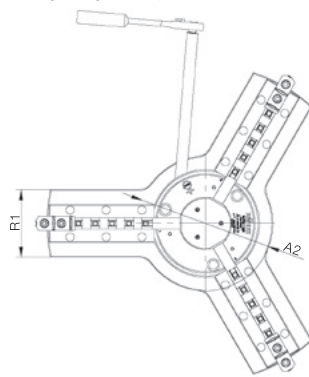
- Weight reduction by up to 75% allows maximum utilization of the machine potential and the clamping of heavier workpieces
- Flexible clamping range thanks to elongated guideways for faster conversion between large and small workpieces
- Easy dismounting of the guideways for clamping smaller workpieces
- Minimum interference contour and better workpiece accessibility thanks to compact design and a reduced design height by up to 78%
- High stability thanks to direct support of the permanently screwed guideways



full base plate



max. lightweight base plate



A08

DURO-TA XT key bar chuck with complete base plate

Item no.	Size	Clamping range external with extended jaws *	Clamping range external with standard jaws **	Interfering contour mm	Jaw travel mm	Weight kg	Speed max. min ⁻¹	Max. Torque Nm	Max. total clamping force kN	Weight reduction compared to a standard chuck %
180312	750 (250)	145-715	8-253	804 / 769	8	183	800	190	185	75
180313	1000 (315)	220-995	12-323	1082 / 1014	10,2	365	570	210	190	68
180314	1250 (500)	220-1190	40-501	1305	12,5	640	570	320	290	65

Customized adaptations of the base plate for further weight reduction on the machine table on request

* By dismounting of the stripping cap and use of standard reversible jaws
** By shortening of the base jaws. Please consider shorter clamping ranges
Further sizes and mountings available on request

Jaws DURO-TA XT

A28
One-piece jaw EB, 3-jaw set, diagonally toothing, hardened

Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
094002	750 (250)	3	set	114	70	26
094003	1000 (315)	3	set	130	79	32
094043	1250 (500)	3	set	167	93	45

Additionally or later applied, hardened stepped jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.
Jaws only usable in basic chuck.

A28
Unstepped jaw BL, 3-jaw set diagonally toothing, unstepped, soft, material 16MnCr5

Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
249679	750 (250)	3	set	118,7	70	26
249680	1000 (315)	3	set	136,6	79	32
249681	1250 (500)	3	set	173,6	93	45

Jaws only usable in basic chuck.

A28
Reversible top jaw UB, 3-jaw set, hardened tongue and groove for external and internal clamping, material 16 MnCr5

Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
094014	750 (250)	3	set	92	50	34,4
094015	1000 (315)	3	set	107	56	35,7
094045	1250 (500)	3	set	130	72	50,4

Additionally or later applied hardened jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.
Jaws only usable in basic chuck.

A28
Base jaw GB, 3-jaw set, diagonally toothing, with mounting bolts

Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw width mm
094006	750 (250)	3	set	110	26
094007	1000 (315)	3	set	125	32
094044	1250 (500)	3	set	160	45

Jaws only usable in basic chuck.

C 21
Draw-down jaws, for interchangeable clamping inserts, diagonally toothing, 1 piece, without clamping inserts

Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
141041	750 (250)	118,7	58,5	26
141043	1000 (315)	136,4	63,9	32
141045	1250 (500)	173,6	73,4	45

Jaws only usable in basic chuck.

C 21
Draw-down jaws, additional clamping range, for interchangeable clamping inserts, diagonally toothing, 1 piece, without clamping inserts

Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
141042	750 (250)	118,7	58,5	26
141044	1000 (315)	136,4	63,9	32
141048	1250 (500)	173,6	73,4	45

Jaws only usable in basic chuck.

Jaws DURO-TA XT

C 15
Interchangeable clamping inserts, 1 piece, with claws

Item no.	Chuck Size
141052	750 (250)/1000 (315)
141055	1250 (500)

Jaws only usable in basic chuck.

C 15
Interchangeable clamping inserts, 1 piece, with serrated toothing

Item no.	Chuck Size
141053	750 (250)/1000 (315)
141056	1250 (500)

Jaws only usable in basic chuck.

C 15
Interchangeable clamping inserts, 1 piece, with heat treatable surface

Item no.	Chuck Size
141054	750 (250)/1000 (315)
141057	1250 (500)

Jaws only usable in basic chuck.

A28
Reversible top jaw UB, 3-jaw set, hardened tongue and groove for external and internal clamping, material 16 MnCr5

Item no.	Number of jaws	Contents of delivery	Jaw length mm	Jaw width mm
180410	3	set	92	34,4
180411	3	set	107	35,7
180412	3	set	130	50,4

Additionally or later applied hardened jaws must be ground out in the chuck.
For jaws which are applied later, send in the chuck.

A28
Unstepped top jaw AB, 3-jaw set, standard design, soft, material 16 MnCr5

Item no.	Chuck Size	Number of jaws	Contents of delivery	Jaw length mm	Jaw height mm	Jaw width mm
094010	750 (250)	3	set	125	50	30
094011	1000 (315)	3	set	145	50	34,3
094046	1250 (500)	3	set	180	73	50,5

C 21
Reversible claw-type top jaws, standard design, tongue and groove, large clamping range, 1 piece, hardened

Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
137119	1250 (500)	124	62	50

Jaws DURO-TA XT

C 21
Reversible claw-type top jaws, standard design, tongue and groove, medium clamping range, 1 piece, hardened

	Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
	137109	750 (250)	72	55	34
	137115	1000 (315)	86	62	34
	137121	1250 (500)	100	62	50

C 21
Reversible claw-type top jaws, standard design, tongue and groove, small clamping range, 1 piece, hardened

	Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
	137108	750 (250)	90	55	34
	137114	1000 (315)	100	62	34
	137120	1250 (500)	124	62	50

C 21
Reversible claw-type top jaws, large design, tongue and groove, small clamping range, 1 piece, hardened

	Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
	137110	750 (250)	80	55	50
	137116	1000 (315)	93	62	50

C 21
Reversible claw-type top jaws, large design, tongue and groove, medium clamping range, 1 piece, hardened

	Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
	137112	750 (250)	72	55	50
	137118	1000 (315)	86	62	50

C 21
Reversible claw-type top jaws, large design, tongue and groove, large clamping range, 1 piece, hardened

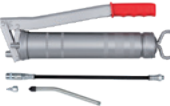
	Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
	137111	750 (250)	90	55	50
	137117	1000 (315)	106	62	50

Accessories DURO-TA XT

C15 Special grease F80 for lathe chucks
For lubrication and conservation of chucking power

	Item no.	Design	Contents
	308555	Cartridge (DIN 1284) Ø 53.5x235mm	0,5 kg
	028975	Tin	1 kg

C15 Grease gun DIN1283

	Item no.	Conne- ction	Contents of delivery
	329093	M10x1	150 mm nozzle tube bent, needlepoint mouthpiece, top mouthpiece, 300 mm high pressure hose with 4 jaw hydraulics cross mouthpiece

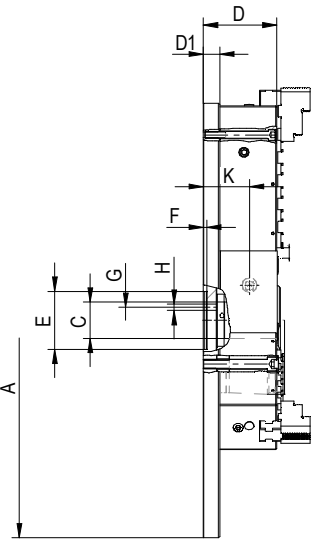
C15 Torque wrench

	Item no.	Torque Nm	Length mm	Output	Working accuracy
	10004116	20-120	435	12,7=1/2"	3%
	10004117	60-320	659	12,7=1/2"	3%

A08 Safety adapter

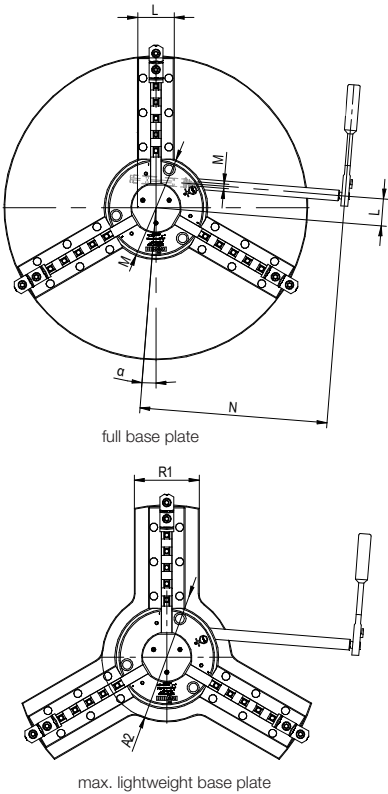
	Item no.	Size	Square	Length mm	Mount
	1129759	750 (250)	14	186	1/2"
	1129449	1000 (315)	17	192	1/2"
	1111583	1250 (500)	19	220	1/2"

Technical data DURO-TA XT



Chuck size A		750	1000	1250
Outer diameter Chuck	A1	256	322	507
Outer diameter Base plate	A2	320	400	590
Jaw movement	B	8	10,2	12,5
Bore 1)	C	62	87	162
	D	127	152	160
	D ¹	28	34	35
	EH6	100	100	100
	F	6	6	6
	G	45	45	45
	H	11	11	11
	K	79,5	98,0	97,5
	L	66,5	86	152,5
	M	SW14	SW17	SW19
	N	464	565	724
	R	90	100	130
	R1	160	180	210
	S	370	495	615
Moment of inertia GD2 2)	kgm ²	10,52	37,92	98,70
Moment of inertia GD2 2) 3)	kgm ²	5,66	18,10	48,93
	α	4,6°	4,6°	4,5°
approx. kg	kg	183	365	640
approx. kg 3)	kg	127	233	436

- 1) With dirt cover
2) The moment of inertia was measured with base jaws but without top jaws
3) With max. lightweight base plate



Max. permissible speed

The maximum permissible speed has been fixed so that 1/3 of the gripping force is still available as residual gripping force if the maximum gripping is applied and the chuck is fitted with its heaviest jaws. The jaws may not project beyond the outside diameter of the chuck. The chuck must be in perfect condition. The specification DIN 6386 Part 1 shall be observed.

Chuck size		750	1000	1250
Max. speed	min ⁻¹	800	570	450

Gripping force

The gripping force is the sum total of all jaw forces acting radially on the stationary workpiece. The specified gripping forces are standard values. They apply to chucks in a perfect condition which have been lubricated with RÖHM grease F79 and F80.

Chuck size		750	1000	1250
Torque applied on key 1)	Nm	70	80	100
Total gripping force 1)	kN	66	80	102
Torque applied on key	Nm	190	210	320
Max. total gripping force	kN	185	240	290

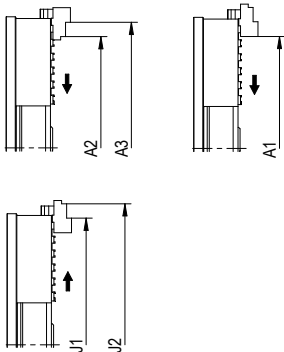
1) Maintaining the accuracy

At this torque the clamping jaws have been ground at the factory; for testing the chuck must be clamped with this torque

Chuck capacities of jaw steps

Chuck size		750	1000	1250
External chucking	A1	144-618	215-864	215-1140
	A2	144-638	330-890	199-1159
	A3	224-719	223-995	340-1200
Internal chucking	J1	227-700	298-946	318-1141
	J2	307-780	404-1052	459-1282
max. interfering contour		808/**773	1086/**1018	1309

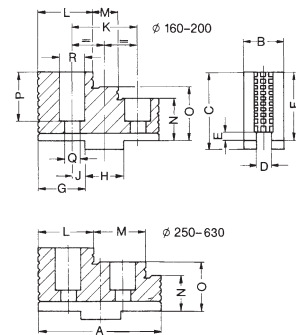
** By shortening of the base jaws. Please consider shorter clamping ranges.



Jaw dimensions DURO-TA XT

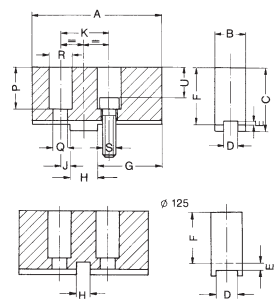
Reversible top jaw **UB**,
completely hardened, cross tenon ground,
jaw steps not ground

Jaws only usable in basic chuck.



Chuck size	750	1000	1250
A	92	107	130
B	34,4	35,7	50,4
C	55	62	79
D	12	12	18
E	3,5	3,5	4,5
F	50	56	72
G	30	35,5	41,4
H	20	26	30
J	10	14	15
K	40	54	60
L	41	40	51
M	40,5	54	71
N	22	26	32
O	36	41	52
P	39	40	57
Q	14	14	18
R	20	20	26
T ¹⁾	57	63,6	80,6
Jaw approx. kg	0,800	1,135	2,535
1) Dimension marked on base jaw			

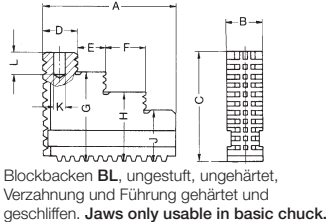
Unstepped soft top jaw **AB**,
for turning out special chucking diameters



Dimensions for extendend design

Chuck size	750		1000		1250
A	125	125	145	145	180
B	30,4	50,5	34,3	50,5	50,5
C	55	80	56	80	80
D	12	12	12	12	18
E	3,5	3,5	3,5	3,5	4,5
F	50	75	50	74	73
G	70	70	74	74	100
H	20	20	26	26	30
J	10	10	14	14	15
K	40	40	54	54	60
P	39	54	34	48	58
Q	14	14	14	14	18
R	20	20	20	20	26
S	M12x1,5	M12x1,5	M12x1,5	M12x1,5	M16x1,5
T ¹⁾	57	72	57,6	71,6	81,6
U	27	42	22	36	42
Jaw approx. kg	1,500	3,700	2,265	4,800	4,500
1) Dimension marked on base jaw					

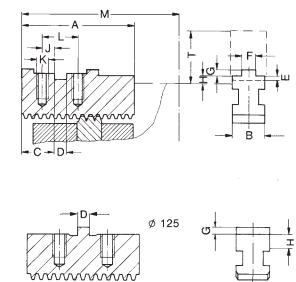
Reversible one-piece jaw **EB**,
hardened and ground, jaw steps not ground
Jaws only usable in basic chuck.



Chuck size	750	1000	1250
A	114	130	167
B	26	32	45
C	70	79	93
D	41,5	40,2	50,5
E	40,3	54	71
F	-	-	-
G	56	64	73
H	-	-	-
J	42	49	53
K	13	13	20
L	19,5	19,5	30
Jaw approx. kg	1,135	1,835	3,665

Chuck size	750	1000	1250
A	118,7	136,6	173,6
B	26	32	45
C	70	79	93
Jaw approx. kg	1,535	2,400	5

Base jaws **GB**,
hardened and ground
Jaws only usable in basic chuck.



Chuck size	750	1000	1250
A	110	125	160
B	26	32	45
C	26	30	35
D	20	26	30
E	5,5	6,5	7,5
F	12	12	18
G	3	3	4
H	7	7,6	8,6
J	10	14	15
K	M12x1,5	M12x1,5	M16x1,5
L	40	54	60
M	163	196	250 294
Jaw approx. kg	0,700	1,065	2,350

Notes