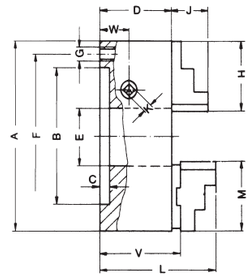
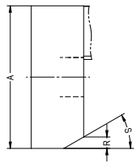
Chuck dimensions DURO-M

Cylindrical centre mount DIN 6350



Enlarged bore max.

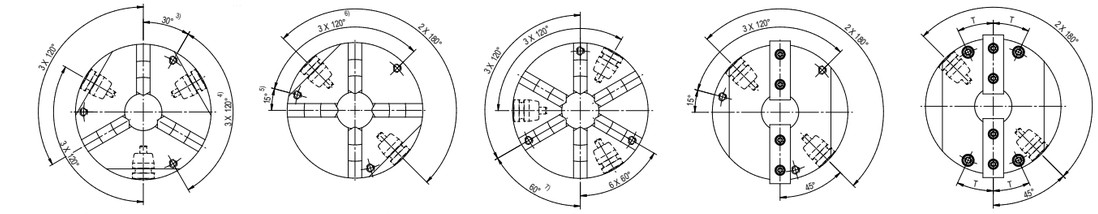


For mounting on dividing heads and other attachments from the front, the lathe chucks with a cylindrical centre mount can also be supplied pre-drilled (at surcharge) G_1, it is also possible to enlarge the bore (measure E, at surcharge).

Size A		74	80	100	125	140	160	200	250	315	400	500	630
	B^{H6}	56	56	70	95	105	125	160	200	260	330	420	545
	C	2,5	3	3	4	4	4	4	5	5	5	5	7
	D	32,5	39,5	50	56	60	65	73,5	82	95	105	120	135
	E	15	19	20	32	40	42	55	76	103	136	190	240
	E^{max}	-	-	21	33	43	50	70	92	114	150	210	253
	F	63	67	83	108	120	140	176	224	286	362	458	586
	G	3xM6	3xM6	3xM8	3xM8	3xM8	3xM10	3xM10	3xM12	3xM16	3xM16	6xM16	6xM16
3B	G1	-	-	-	3xØ9	-	3xØ10,5	3xØ11	3xØ14	3xØ14	3xØ18	6xØ18	6xØ18
4B	G1	-	-	-	4xØ9	-	3xØ10,5	3xØ11	3xØ14	3xØ14	3xØ18	6xØ18	6xØ18
2B	G1	-	-	-	4xØ9	-	4xØ10,5	4xØ11	4xØ14	4xØ14	4xØ18	-	-
	H	32	37	48	52	61	61	69	90	130	130	190	190
	J	14	14	18	22,5	22,5	26	32,5	40	46	43	54,5	54,5
	K	61)	6	8	9	9	10	11	12	14	17	19	19
	L	-	-	80,5	95,5	106	108	119,6	139,6	155	171,5	201,5	216,5
	M	-	-	47	56	66,7	66,7	79,5	95	109,5	127	127	127
	V	-	-	53,6	61	-	69,7	80,2	89,9	100,4	113,4	128,4	143,3
	W	13	14,5	18	20	21	22,45	25,7	26,5	30	35	38	48
3+4B[8]	R	5,5	8	10	10	11	13	16	20	24	-	-	-
	S	30°	30°	30°	26°	26°	30°	30°	30°	30°	-	-	-
2B	R	-	-	17	20	-	23	25	32	38	-	-	-
	S	-	-	30°	30°	-	30°	30°	30°	30°	-	-	-
	T	-	-	-	24°	-	25°	25°	30°	30°	-	-	-
	kg	0,9	1,3	2,5	4,3	5,7	7,5	13,0	22,8	43,3	75	131	217

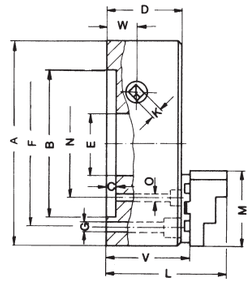
G_1 = Mounting from front * 4-jaw = 4 x Ø 9

Position of the fastening screws for lathe chucks with cylindrical centring mount size 74-630



[1] Hexagon, [3] 25° for size 125-315 with fastening from the front, [4] 6 X 60° for size 500 and 630, [5] 25° for size 125 with fastening from the front, [6] 4x90° for size 125 with fastening from the front, [6] 6x60° for size 500 and 630, [7] 30° for fastening from the front, [8] not for 4B-chuk with fastening from the front

Cylindrical centre mount
with front mounting



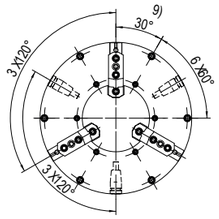
Enlarged bore max.

Size	ØA	700	800	1000	1250
	B	610	710	910	910
	C[2]	$7^{+0,03}$	$7^{+0,03}$	$7^{+0,03}$	$7^{+0,03}$
	D	147	147	157	157
	E	310	380	460	550
	$E_{max.}$	330	420	580	580
	F	660	760	950	950
3-Jaw 4-Jaw	G	6xØ22 8xØ22	6xØ22 8xØ22	6xØ26 8xØ26	6xØ26 6xØ26
	K	19	19	24	24
	L	240,6	240,6	269,6	269,6
	M	210	210	210	210
	N	360	460	610	610
3-Jaw 4-Jaw	O	6xØ18 4xØ18	6xØ18 4xØ18	6xØ18 4xØ18	6xØ18 6xØ18
	V	158	158	166	166
	W	48	48	53	53
	ca. kg	280	350	590	850

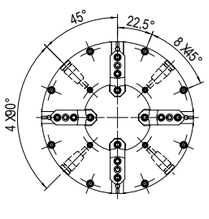
[2] Adaptor plate dimension $7_{-0,03}$

Position of fixing screws and pinions on lathe chucks with cylindrical centre mount sizes 74-630 (size 350 on request)

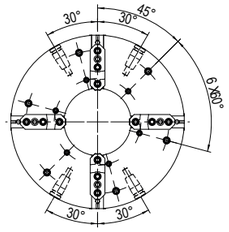
Size 700-1250



Size 700-1000



Size 1250



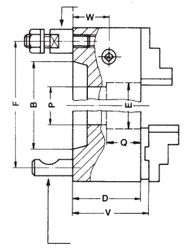
[9] 25° for size 1250

Chuck dimensions DURO-M

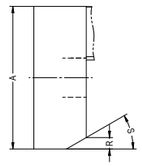
Short taper mount

DIN 55021
with setscrews and locknuts

DIN 55027
with studs and nuts



DIN 55029 with studs for Camlock

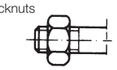


Size	A	100	125		160		200			
Taper size		3	3	4	4	5	3	4	5	6
	B	53,9	53,9	63,5	63,5	82,5	53,9	63,5	82,5	106,4
	D	75	69	69	66	66	74,5	74,5	74,5	74,5
	E	20	32	32	42	42	51,2	55	55	55
DIN Caml.	F	75 70,6	75 70,6	85 82,5	85 82,5	104,8	75 70,6	85 82,5	104,8	133,4
	P	-	-	-	-	-	51,2	-	-	-
	Q	-	-	-	-	-	33	-	-	-
	V	78,3	73,7	73,7	70,7	70,7	81,2	81,2	81,2	81,2
	W	43	33	33	23,45	23,45	26,7	26,7	26,7	26,7
	R	10	10	10	13	13	-	-	13	13
	S	30°	26°	26°	30°	30°	-	-	30°	30°
Mounting holes	DIN	3 3	3 3	3 3	3 3	4 6	3 3	3 3	4 6	4 6
	ca. kg	4	5,5		8,5		15,5			

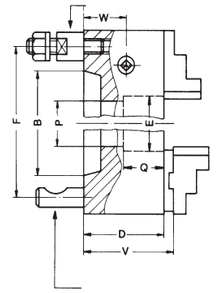
[1] 50 with Camlock, other dimensions in the table on the top

Short taper mount

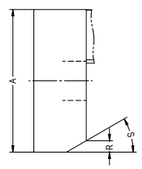
DIN 55021
with setscrews and locknuts



DIN 55027
with studs and nuts



DIN 55029
with studs for Camlock



Size A		250		315			350			400	
Taper size		6	8	6	8	11	6	8	11	8	11
B		106,4	139,7	106,4	139,7	196,9	106,4	139,7	196,9	139,7	196,6
D		83	83	96	96	104	122	122	122	106	106
E		76	76	103	103	103	103	115	115	136	136
F	DIN	133,4	171,4	133,4	171,4	235	133,4	171,4	235	171,4	235
	Caml.										
P		-	-	-	-	-	103	-	-	-	-
Q		-	-	-	-	-	81	-	-	-	-
V		90,9	90,9	101,4	101,4	109,4	127,4	127,4	127,4	114,4	114,4
W		27,5	27,5	31	31	39	56	56	56	36	36
R		20	20	24	24	24	-	-	-	-	-
S		30°	30°	30°	30°	30°	-	-	-	-	-

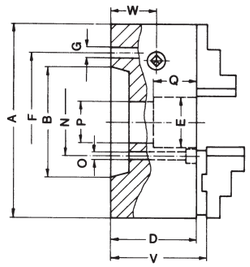
Size A		500			630	
Taper size		8	11	15	11	15
B		139,7	196,9	285,8	196,9	285,8
D		122	122	122	137	137
E		136	190	190	192,7	240
F		171,4	235	330,2	235	330,2
P		136	-	-	192,7	-
Q		61	-	-	63	-
V		130,4	130,4	130,4	145,3	145,3
W		40	40	40	50	50
R		130,4	130,4	130,4	145,3	145,3
S		40	40	40	50	50
Mounting holes	DIN	4	6	6	6	6
	Caml.	6	6	6	6	6
approx. kg		150			225	

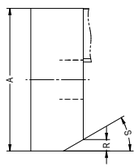
All other dimensions should be taken from the table about chucks with cylindrical centre mount

Chuck dimensions DURO-M

Short taper mount

DIN 55026
Mounting from front





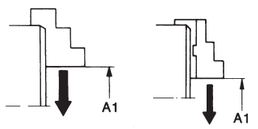
Size A		160	200		250			315		400	
Taper size		5	5	6	5	6	8	6	8	8	11
B		82,5	82,5	106,4	82,5	106,4	139,7	106,4	139,7	139,7	196,9
D		66	74,5	74,5	83	83	83	96	96	106	106
E		42	42	55	76	55	76	103	76	136	125
F[2]		-	-	-	104,8	-	-	133,4	-	171,4	-
G		-	-	-	11[1]	-	-	14	-	18	-
N[3]		61,9	61,9	82,6	-	82,6	111,1	-	111,1	-	165,1
O		11[1]	11[1]	14	-	14	18	-	18	-	22
V		70,7	81,2	81,2	90,9	90,9	90,9	101,4	101,4	114,4	114,4
W		23,45	26,7	26,7	275	275	275	31	31	36	36
R		13	16	16	20	20	20	24	24	-	-
S		30°	30°	30°	30°	30°	30°	30°	30°	-	-
Mounting holes	*	3	3	6	3	6	6	6	6	6	6
	**	4	4	4	4	4	4	4	4	4	4
approx. kg		8	14,5		25			44,5		82	

Size ØA		500		630		700		800			1000		1250	
Taper size		8	11	11	15	11	15	11	15	20	15	20	15	20
B		139,7	196,9	196,9	285,9	196,9	285,9	196,9	285,9	412,8	285,9	412,8	285,9	412,8
D		122	122	137	137	149	149	149	149	149	159	159	159	159
E		136	190	190	190	310	285	380	380	380	460	505	550	550
F[2]		171,4	235	235	-	235	330,2	235	330,2	463,6	330,2	463,6	330,2	463,62
G		18	22	22	-	22	26	22	26	26	26	26	26	26
N[3]		-	-	-	247,6	-	-	-	-	-	-	-	-	-
O		-	-	-	26	-	-	-	-	-	-	-	-	-
P		-	-	-	-	193	281,2	193	281,2	-	281,2	407,5	281,2	407,5
Q		-	-	-	-	76	76	76	76	-	85	85	85	85
V		130	130,4	145,3	145,3	159,9	159,9	159,9	159,9	159,9	168	168	168	168
W		40	40	50	60	50	50	50	50	50	55	55	55	55
Mounting holes	*	6	6	6	6	6	6	6	6	6	8	8	8	8
	**	-	8	8	8	8	8	8	8	8	8	8	8	8
approx. kg		151	139	220		295		350			590		850	

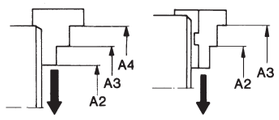
[1] 12 bei ASA B 5.9 A1 / A2 Zoll [2] für DIN 55026 Form A und B; DIN 55021 Form A und B; ASA B 5.9 A1 / A2 [3] für DIN 55026 Form B; ASA B 5.9 A1 / B1
* 3-Backen ** 4-Backen

Chucking capacities of jaw steps (standard values)

External chucking



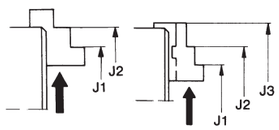
Size	74	80	100	125	140	160	200	250
A1 (BB)	2-24	2-30	3-38	3-53	3-53	4-72	4-100	5-122
A2 (DB)	2-24	2-30	3-38	3-53	3-53	3-72	4-100	5-122
A3 (DB)	23-46	27-55	38-71	39-89	47-97	47-116	56-152	73-190
A4 (DB)	45-68	52-80	70-100	75-125	91-140	91-160	104-200	131-250
max. swing dia.	88	104	128	157	174	194	238	302
Jaw movement	11	14	15	25	25	34	48	58



Ø 74-630 Ø 700-1250

Size	315	400	500	630	700	800	1000	1250
A1	6-135	20-200	35-260	50-350	110-350	150-450	250-600	320-600
A2	6-135	20-200	35-260	50-350	280-672	325-853	425-1070	490-1150
A3	96-225	110-300	140-360	190-490	356-748	400-928	500-1150	564-1224
A4	186-315	200-400	280-500	330-630	-	-	-	-
max. swing dia	395	480	600	730	1000	1170	1390	1476
Jaw movement	64	100	110	150	120	150	175	140

Internal chucking



Ø 74-630 Ø 700-1250

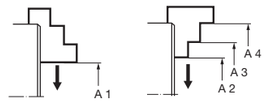
Size	74	80	100	125	140	160	200	250
J1	23-46	25-53	33-66	37-87	39-89	39-107	44-140	59-165
J2	45-68	50-78	65-94	73-123	83-132	83-152	92-186	119-236

Size	315	400	500	630	700	800	1000	1250
J1	96-224	100-300	135-355	150-450	212-648	251-855	356-1080	426-1162
J2	186-305	190-390	275-460	290-590	290-758	326-930	430-1150	500-1236
J3	-	-	-	-	526-922	566-1094	660-1314	740-1400

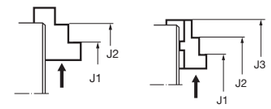
Clamping ranges for lathe chucks with individual adjustable jaws (ES) are in approximate conformity with the above values. They are valid for 3- and 4-jaw chucks and lathe chucks with reversible jaws.
Do not exceed maximum chucking ranges.

Jaw dimensions DURO-M

External chucking



Internal chucking



Chuck capacities of jaw steps (reference values)

valid for 6-jaw chuck

Size	160	200	250	315	400
A1 (BB)	8-72	9-100	14-122	15-135	20-200
A2 (DB)	8-72	9-100	14-122	15-135	20-200
A3 (DB)	52-116	61-152	81-190	105-225	110-300
A4 (DB)	96-160	109-200	141-250	195-315	200-400
Biggest rotation-Ø	194	238	302	395	480
Jaw stroke	32	45	54	60	100

Size	160	200	250	315	400
J1	46-107	51-140	70-165	100-224	100-300
J2	89-152	97-186	128-236	190-305	190-390

Max. permissible speeds for ZS - ZSU, Orange Line, ZS Hi-Tru to DIN 6350

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 speed limit for chucks with cast iron bodies is based on the permissible peripheral speed for cast iron. The specification DIN 6386 Part 1 shall be observed.

Size	3 and 4 jaws Steel body
74	-
80	7000
100	6300
125	5500
140	5000
160	4600
200	4000
250	3000
315	2300
400	1800
500	1300
630	850
700	800
800	700
1000	560
1250	450

Claming force 3 jaw chuck ZS - ZSU, Orange Line, ZS Hi-Tru to DIN 6350

The clamping force is sum total of all jaw forces acting radially on the stationary workpiece. The clamping forces are approximate values. To obtain the specified clamping forces, the chuck must be in a perfect condition and lubricated with F 80 lubricant recommended by RÖHM.

Size	Torque key	Total clamping force
74	30	11
80	30	13
100	60	27
125	80	31
140	90	40
160	110	47
200	140	55
250	150	63
315	180	69
400	240	92
500	260	100
630	280	105
700	280	105
800	300	110
1000	450	115
1250	450	115