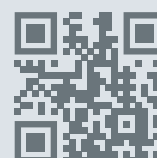
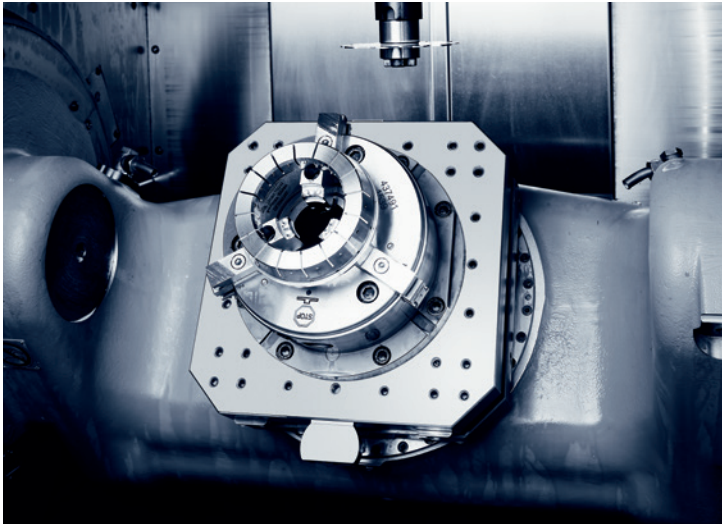


CATALOG OF STANDARD CLAMPING TOOLS

WORKHOLDING AND TOOL CLAMPING







TAILORMADE CLAMPING TECHNOLOGY

Precision made by Nann: whether high-quality standard or custom-made special clamping devices, it is our claim to offer you optimum devices for workholding or tool clamping in most varied areas of usage at all times.

Innovative work processes, highest quality in material and machining and short delivery time – this is how you can benefit from our expertise. We deliver all standard sizes from our warehouse. Clamping devices which are not available from stock will quickly be ready for employment where you need them thanks to short production times. Our offer also includes a fast overnight service ensured by reliable logistic partners and a 24-hour regrinding service. Nann's comprehensive vertical integration makes constant high quality possible.

You can rely on more than 85 years of expert craftsmanship, know-how, accuracy and state-of-the-art production facilities and benefit from the excellent price-performance ratio.

Special clamping devices – another core area at Nann

From simple special collets to complex clamping: development and manufacture of special clamping devices have been core competences of our company for a long time. Our portfolio comprises special collets based on standard collets, pure special collets and special collet chucks. At the beginning we focus on successful communication with our customers, in order to ensure that you will receive exactly the clamping devices you need. Another decisive factor for you is our in-house

test centre for functional tests of all kinds of clamping devices.

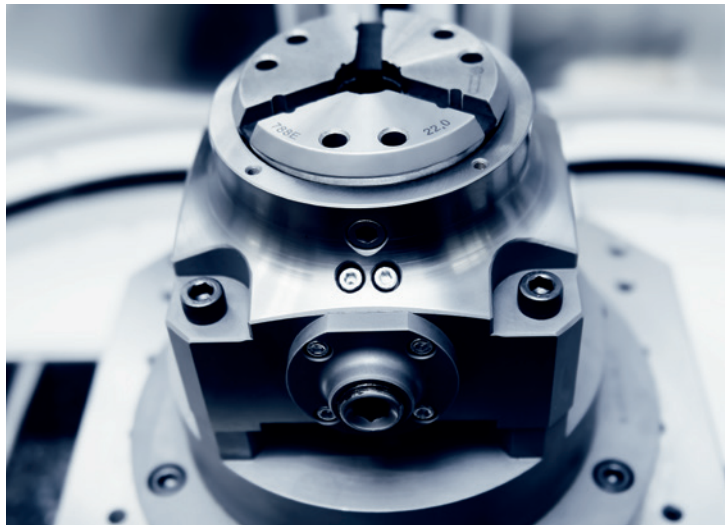
Dealer network

You can find comprehensive information on Nann's world-wide sales system in the menu "Contact & Representation" on our website www.nann.de

Nann – your partner for clamping technology

At Nann a skilled team with profound technical understanding awaits you. You will benefit from the close cooperation with our development and production departments.

Your request is in good hands with us.



NANN SERVICES FOR WORKHOLDING AND TOOL CLAMPING

Nann is your competent and capable partner for services involving workholding and tool clamping.

We offer a variety of different services such as internal grinding, eroding, siliconizing and coating. Our service is characterized by a high degree of flexibility and the extensive experience of our staff.

Our service portfolio at a glance:

Internal grinding

Within one working day we can grind used collets or collets from stock to intermediate sizes or drill out stepped holes. We can also grind used pressure sleeves or grind your used spindles for pressure sleeves with oversized dimensions.

Eroding

We are in a position to erode profiles within the shortest possible times, regardless of whether they are rectangular, hexagonal or special profiles. Collets and expanding collets can also be quickly machined to match special workpiece shapes by means of erosion processes. Just ask us.

Siliconize

We seal off the slots of collets or expanding sleeves with silicon. This helps prevent the entry of dirt and machining chips. This procedure can also be done for used collets and is a service that can be carried out within 2-3 working days.





Coatings

We can coat your collets and feed fingers by means of various processes. We would be glad to advise you as to which coating is suitable for your particular application. Just ask us.

Plastic coating

Plastic coatings prevent scratching of the workpiece to be clamped or scoring of the material in the case of feed fingers. A plastic coating is not of much help for relatively small drilled holes, and not possible at all for holes smaller than 5.0 mm.

Hard metal coating

A hard metal coating can be applied to collets from stock, both for round types and profiles. The surface is made slightly rough and is very resistant to wear and abrasion, with higher friction forces. Collets or feed collets can have multiple coatings.

DNC coating

A DNC coating can be applied to collets from stock, both for round types and profiles. The surface is made smooth and is very resistant to wear and abrasion.

TIN coating

A TIN coating can be applied to collets from stock, both for round types and profiles. The surface is made smooth and is very resistant to wear and abrasion.

Other forms of coating are available on request.



CATALOG OF SPECIAL CLAMPING DEVICES

If you cannot find the solutions you are looking for in this product catalog because your requirements are too specific and individual, please do not hesitate to contact us. Clamping device engineering has long been at the heart of our company. Whether as original equipment for tool and machine construction or as complete system solutions for users from a wide range of industries, Nann's perfectly tailored special clamping devices fit optimally into your processes.



Simply request our catalog for special clamping devices, either in printed form or conveniently download it using the QR code.

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Collets

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Catalog valid from August 2025.

Subject to technical changes.

DEADLENGTH COLLETS

Use:

- for workholding clamping
- for bar or chuck work
- no axial movement while the chuck is clamping

Bore patterns:

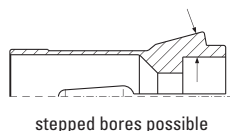
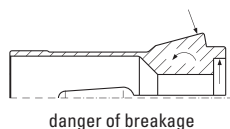
(G): smooth

(Q): with round grooves from 6.0 mm

(LQ): with cross grooves from 6.0 mm, serrated in the case of round bores greater than 9.0 mm; higher clamping force

Taper angle of the clamping sleeve:

The taper of the clamping sleeve should be 15' (one-sided) flatter than the taper angles given in the tables. This frees the collets on release and provides low undersized clamping.



Stepped bores:

In the case of stepped bores or when using collet stops, the clamping point should be within the taper of the collet, otherwise the collet will tend to break due to bending stresses.

Hardness:

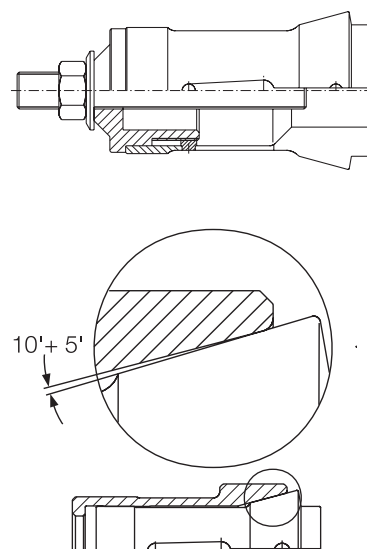
The collets are made from special spring steel. Where possible, by partial tempering, the hardness of the taper and clamping bore is approx. HRc 60. The shank and sprung area are hardened to spring.

Taper grinding:

The clamping taper is lightly ground at the slot edges to ease removal of the collets from the mounting thus making possible low undersized clamping.

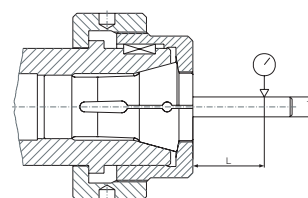
Stops for collets:

Adjustable stops which are easily fitted into the rear bore of the collets. Bores are available for standard models.



running concentricity (truth)

clamping diameter		testing point	running concentricity	
d from	d to	L	standard	high precision
1	1,6	6	0,02	0,01
1,6	3	10	0,02	0,01
3	6	16	0,02	0,01
6	10	25	0,02	0,01
10	18	40	0,03	0,015
18	24	50	0,03	0,015
24	30	60	0,03	0,015
30	50	80	0,04	0,02
50	60	100	0,04	0,02



similar to DIN 6343
The LQ pattern may have a radial runout which is 50 % higher. The precision design attracts an additional charge.

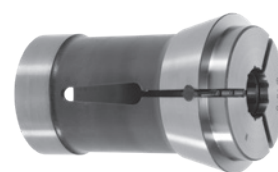
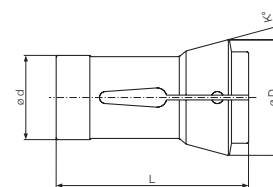
deadlength collets

art. no.	pic.	d	D	L	K°	bore pattern			max. diameter		
						LQ	Q	G	○	⬡	□
100 E	1	6	10	30	15			*	4,5		
101 E	1	8	12	42	16			*	6		
102 E	1	8	13,7	30	21			*	5,5		
103 E	1	8	14	35	15			*	5		
109 E	1	10	15,5	48	20			*	7		
110 E	1	10	16	43	15			*	7		
111 E	1	10	16	46	20		*		7		
112 E	1	11	18,7	41	22			*	7,5		
113 E	2	12	15,5	30,5	10			*	10		
117 E	1	14	18	46	13			*	10		
118 E	1	14	19,5	46	15			*	10	9	7
120 E	1	15	21	64	16		*		12	9	7
1212 E	1	16	21	64	16		*		13		
125 E	1	17,5	22	51	15		*		14		
136 E	1	20	26	54	15		*		16	14	11
138 E	1	20	28	67,3	16		*		16	14	11
139 E	1	22	28	67	18		*		16	13	10
140 E	1	22	30	55	15	*	*		16	14	10
143 E	1	25	31	54	15		*		16	14	11
145 E	1	26	35	77	16		*		20	17	14
146 E	1	26	32	67	13		*		20	17	14
148 E	1	28	38	70	15	*	*		24	20	16
156 E	1	30	39,3	87	15		*		25	22	14
157 E	1	30	42	80	16		*		25	22	18
1446 E	1	30	38	65	15		*		25	22	18
161 E	1	32	45	75	15	*	*		28	22	18
1497 E	1	34	44	78	16		*		25	24	20
162 E	1	35	43	70	15		*		25	22	17
163 E	1	35	48	80	15	*	*		30	27	22
1536 E	1	37	47	92	16		*		32	27	22
164 E	1	38,08	49	108	15		*		32	27	22
171 E	1	42	55	94	15		*		37	32	26
173 E	1	48	60	94	15	*	*		42	36	28
177 E	1	58	70	94	15		*		52		
185 E	1	66	84	110	15	*	*		60	50	40
190 E	1	88	106	115	15		*		80		
193 E	1	90	107	130	15		*		80	85	70
196 E	1	112	138	120	15		*		100	85	70

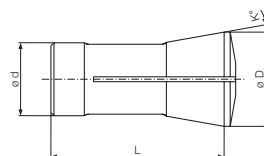
Highlighted art. no. according to DIN 6343

Some collets are marked with both LQ and Q; when ordering one of them, please indicate bore patterns for pattern Q only.

Pressure sleeves and clamping fingers on request.

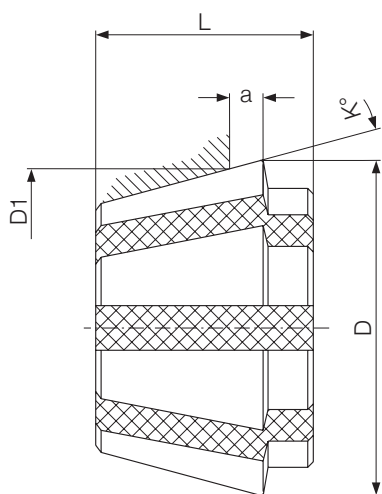


Pic. 1



Pic. 2

MULTI-RANGE COLLETS



Use:

- for workholding clamping
- for bar or chuck work
- clamping range 2 mm
- no axial movement while chuck is clamping
- can be exchanged with DIN 6343 steel collets
- completely sealed against coolant and swarf

Hardness:

The segments of multi-range collets are made from a special tool steel. The hardness is approx. HRc 60.

Taper angle of the clamping sleeve:

The taper of the clamping sleeve must exactly match the taper angles of the collets given in the tables, otherwise the clamping segments will not clamp the workpiece along its entire length.

Stops for collets:

If stops are used, the rear of the clamping segments must be supported if the clamping length is short.



smooth bore

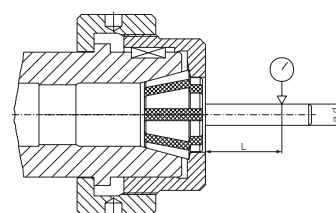
art. no.	exchangeable with steel coll.	rubber collets	D min	D max	a min	a max	D1	L	K°	clamping range	clamping range
755 E	140 E	series 12	29,5	31,4	1	4,5	29	22	14°45'	3 - 16	+0,3 / -1,3
760 E	148 E	series 18	37,5	40,4	1	6,5	37	27	14°45'	4 - 20	+0,3 / -1,3
765 E	161 E	series 20	44,5	47,4	1	6,5	44	31	14°45'	4 - 26	+0,3 / -1,3
770 E	163 E	series 24	47,5	50,4	1	6,5	47	31	14°45'	6 - 30	+0,3 / -1,3
775 E	173 E	series 36	59,5	62,4	1	6,5	59	39	14°45'	7 - 43	+0,3 / -1,3
780 E	185 E	series 52	83,5	86,4	1	6,5	83	50	14°45'	19 - 61	+0,3 / -1,3

serrated bore

Art. no.	exchangeable with steel coll.	rubber collets	D min	D max	a min	a max	D1	L	K°	clamping range	clamping range
755 E-F	173 E	series 36	59,5	62,4	1	6,5	59	39	14°45'	11 - 43	+0,3 / -2
780 E-F	185 E	series 52	83,5	86,4	1	6,5	83	50	14°45'	19 - 61	+0,3 / -2

running concentricity

Clamping diameter		Testing point	running concentricity	
d from	d to		standard	high precision
1	1,6	6	0,02	0,01
1,6	3	10	0,02	0,01
3	6	16	0,02	0,01
6	10	25	0,02	0,01
10	18	40	0,03	0,015
18	24	50	0,03	0,015
24	30	60	0,03	0,015
30	50	80	0,04	0,02
50	60	100	0,04	0,02



similar to DIN 6343
The precision design attracts an additional charge.

FEED FINGERS

Use:

- as feed fingers for feeding forward workpiece bars in automatic lathes
- as pick-up collets for moving up workpiece bars on NC lathes for repositioning of workpieces

Bore patterns:

- smooth
- on request with round grooves

Hardness:

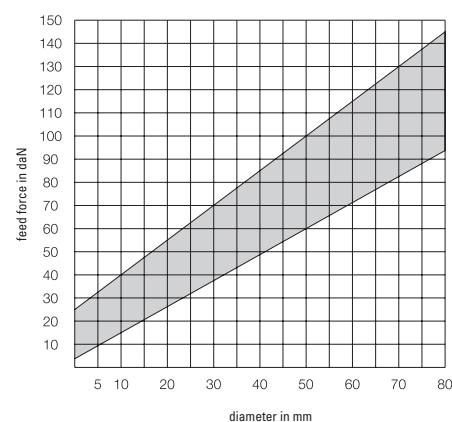
Feed fingers are made from special spring steel. The front component with the clamping bore has a hardness of approx. HRc 60 – where this is not prevented by the partial tempering. The thread and spring areas are hardened to spring temper.

Feed force:

Feed fingers are supplied sprung together so that, when the dimensions are nominal, they pretension the workpiece rods or workpieces.

The feed force table below gives the reference values. A hardened ground test mandrel with a tolerance of h7 must be used for checking.

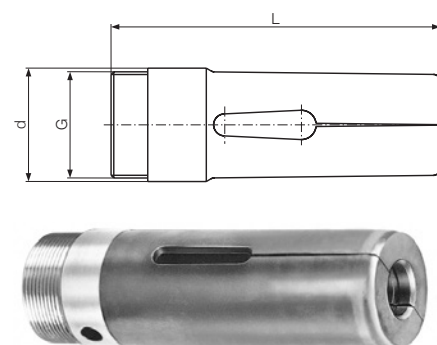
Feed fingers with increased feed force can be made for an extra charge.



feed fingers

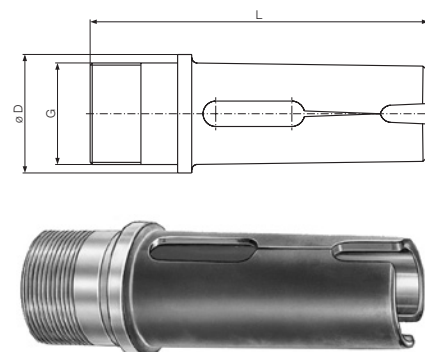
art. no.	D	thread G	L	max. diameter		
				○	⬡	□
207 E	18	M 16 x 1 L	70	12	11	9
217 E	21	M 20 x 1 L	70	16	14	11
220 E	24	M 22 x 1 L	85	18	16	13
236 E	30	M 28 x 1 L	95	24	21	16
237 E	31	M 29 x 1 L	90	25	22	18
254 E	42	M 40 x 1 L	116	36	31	25
273 E	60	M 58 x 1 L	140	52	45	36

Highlighted art. no. according to DIN 6344



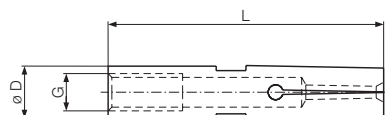
external feed fingers

art. no.	D	Thread G	L	max. diameter		
				○	⬡	□
242 E	42	M 36 x 1,5	120	30	24	20
259 E	56	M 50 x 1,5	138	42	36	29
278 E	75	M 68 x 1,5	138	60	52	42

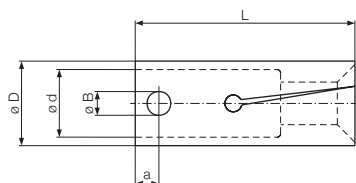


CLAMPING SLEEVES FOR LOAD-FEEDERS

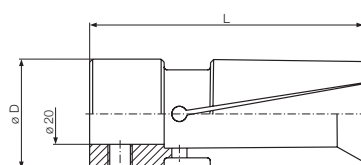
for TRAUB and Hagenuk load-feeders



Pic. 1



Pic. 2



Pic. 3



art. no.	pic.	D	L	B	d / G	clamping range
200 E	1	5	37		M 4	1,5 - 4,5
208 E	1	7	37		M 5	2 - 5,5
210 E	2	10	40	4	7	2,5 - 8
212 E	2	12	40	4	8	3 - 10
203 E	2	15	40	6	11	3 - 13
203 E - 18	2	18	40	6	11	3 - 16
225 E	2	20	65	8	14	4 - 18
222 E	2	25	65	8	20	4 - 22
227 E	2	28	65	8	20	10 - 25,5

for FMB-Turbo load-feeders

art. no.	pic.	D	L	d		clamping range
2292 E	3	25	90	20		2,5 - 23
2402 E	3	30	90	20		4 - 28
2422 E	3	32	90	20		4 - 30
2490 E	3	36	90	20		5 - 33
2517 E	3	38	90	20		10 - 32
2565 E	3	40	90	20		5 - 38
2578 E	3	42	90	20		5 - 40
2610 E	3	45	90	20		6 - 42
2670 E	3	50	90	20		7 - 47
2704 E	3	54	90	20		14 - 50
2770 E	3	60	90	20		12 - 57
2780 E	3	63	90	20		14 - 60
2790 E	3	65	90	20		10 - 60
2857 E	3	73	90	20		20 - 67
2860 E	3	75	90	20		20 - 69
2912 E	3	80	90	35		50 - 72

FMB Turbo clamping sleeves are also available with annular springs from D = 42 mm

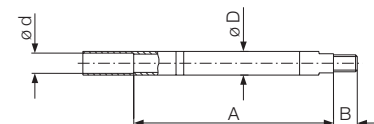
CLAMPING SLEEVE HOLDERS FOR LOAD-FEEDER

The clamping sleeve holders are used to take standard clamping sleeves in the various different load-feeders. They form the connection between the rotating clamping sleeve and the stationary feed rod.

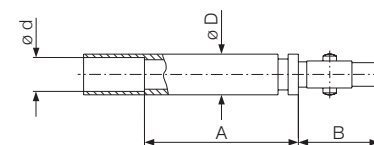
The design of the clamping sleeve holders makes it easy to change both the clamping sleeve and the whole sleeve holder.

for TRAUB, Hagenuk and FMB-Turbo load-feeders

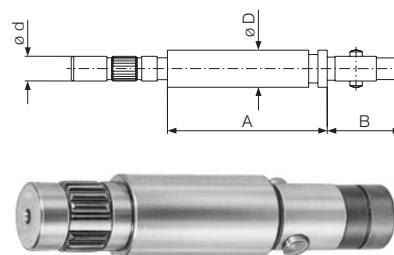
art. no.	pic.	D	A	B	d	for load-feeders type
200 E-L	1	5	56	7	4,5	Traub, Hagenuk, FMB
208 E-L	1	7	59	7	6,5	Traub, Hagenuk, FMB
210 E-LH	3	10	45,5	24	8	Hagenuk, FMB
210 E-LT	2	10	45,5	24	9	Traub
212 E-LH	3	12	45,5	24	8	Hagenuk, FMB
212 E-LT	2	12	45,5	24	11	Traub
203 E-L	3	15	50	24	12	Traub, Hagenuk, FMB
203 E-18L	3	18	50	24	12	Traub, Hagenuk, FMB
225 E-L	3	20	50	40	17	Traub, Hagenuk, FMB
222 E-L	3	25	50	40	20	Traub, Hagenuk, FMB



Pic. 1



Pic. 2



Pic. 3

GUIDE BUSHES FOR LATHES

Standard guide bushes:

Drawback guide bushes are used for normal use on Swiss-type lathes. These types of guide bushes are set to the tolerance of the material to be worked using an adjustable nut. The quality of the carbide metal and the shape of the bore are chosen to achieve optimum results for most materials.

- clamping bore with carbide inserts
- very long lifetime
- high running concentricity
- standard types ex stock
- special profile bores within a few days
- egrinding of bushes within one day

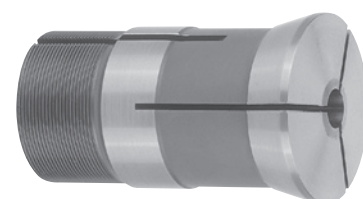
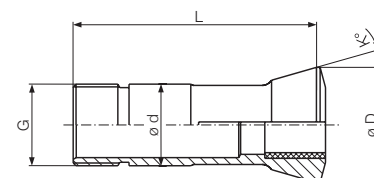
Special guide bushes are available for special cases where high radial forces are involved while working or when materials are difficult to machine:

- guide bushes with spiral slots
- fixed guide bushes
- broached guide bushes

Carbide guide bushes for most common Swiss-type machines available: Bechler, Citizen, Gauthier, Gildemeister, Manurhin, Petermann, Star, Strohm, Tornos, Traub etc.

guide bushes

art.- Nr.		d	D	L	K°	thread G	max. diameter		
									
3077 E	1.001	9	12,5	44	16	M8 x 0,75	4,5	3	2,5
3078 E	265.001	9	13	52	30	M9 x 0,7	4,5	3	2,5
3133 E	5.001	11	14,5	53	16	M10 x 0,75	7	6	4,5
3134 E	3.001	11	14,5	53	16	M10 x 0,75	6	5	4
3147 E	53.001	12	15,5	50	16	M10 x 0,75	7	6	4,5
3149 E	261.001	12	16	52	30	M12 x 1	7	6	4,5
3260 E	8.001	16	20,5	59	16	M14 x 1	10	8,5	6,5
3319 E	171.001	18	21,8	60	30	M18 x 1	13	11	9
3320 E	166.001	18	21,8	60	30	M16 x 1	12	11	9
3322 E	40.031	18	22	61	20	M18 x 1	13	11	9
3383 E	120.001	20	24	55	30	M20 x 1	13	10,5	7,5
3438 E	450.001	21	24	57,5	12	M18 x 1	15	12	9
3454 E	13.001	22	29	65	16	M19 x 1	16	11	8
3455 E	39.001	22	29	68	16	M22 x 1	17	14	10
3507 E	61.002	24	29,5	61	30	M24 x 1	17	14,5	11
3585 E	492.001	27	30	57,5	12	M24 x 1	16	14	11
3586 E	493.001	27	30	67,5	12	M24 x 1	16	14	11
3602 E	22.001	28	34	82	16	M25 x 1	21	17	13
3604 E	10.001	28	33	53	20	M28 x 1	20	17	13
3610 E	18.001	28	38	78	30	M25 x 1	21	17	13
3708 E	282.001	32	40	66	30	M32 x 1	22		
3733 E	451.001	34	41	87,5	10	M34 x 1	27	23	15
3735 E	40.032	34	46	150	20	M32 x 1,5	25	21	16
3765 E	32.001	38	46	57	20	M38 x 1,25	30		
3817 E	61.001	40	48	71	30	M40 x 1	26	23	15
3827 E	28.001	42	49	82	16	M40 x 1	32	28	
3835 E	27.001	44	53	87	20	M40 x 1	32	28	18
3887 E	115.001	48	56	81	30	M48 x 1,25	35	30	20
3890 E	19.001	48	58	65	20	M48 x 1,25	32	28	18
3894 E	36.001	50	60	95	15	M50 x 1	30		



Guide bushes are available for all common machine types manufactured by Bechler, Citizen, Gauthier, Gildemeister, Manurhin, Petermann, Star, Strohm, Tornos, Traub, etc.

COLLETS FOR MULTI-SPINDLE AUTOMATIC LATHES

Use:

- for workholding clamping
- for bar or chuck work

Bore patterns:

- up to 6 mm: smooth bore
- from 6 mm: round grooves
- from 9 mm: serrated for round bores

Hardness:

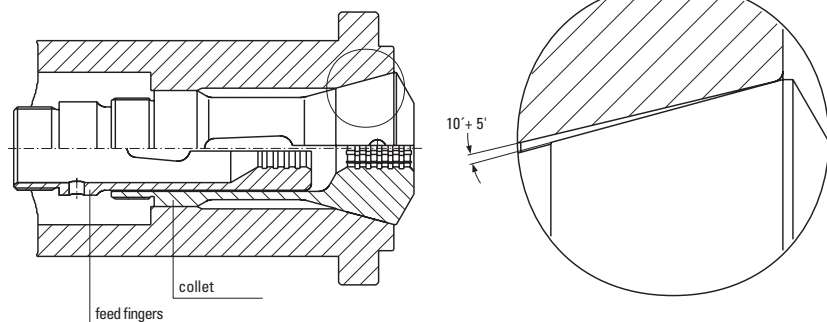
The collets are made from special spring steel. Where possible, by partial tempering, the hardness of the taper and clamping bore is approx. HRc 60. The shank and sprung area are hardened to spring temper.

Taper grinding:

The clamping taper is lightly ground at the slot edges to ease removal of the collets from the mounting thus making possible low undersized clamping.

Taper angle of the clamping sleeve:

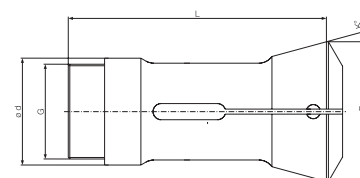
The taper of the clamping sleeve should be 15' (one-sided) flatter than the taper angles given in the tables to ease removal of the collet from the mounting taper thus making possible low undersized clamping.



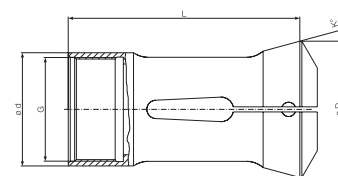
collets for multi-spindle automatic lathes

Art. no.	d	D	L	K°	thread G	max. diameter		
						○	⬡	□
9001 E	25	35	73	15°30'	M 22 x 1 L	14	12	10
9006 E	30	40,5	80	15	M 26 x 1 L	16	14	11
9007 E	32	41,5	79	15	M 28 x 1 L	19	16	13
9012 E	34	42	85	16	M 30 x 1 L	20	17	14
9013 E	26,8	34	83,5	15	M 24 x 1 L	13	11	9
9015 E	25	36,1	68	15	M 22 x 1 L	13	11	9
9016 E	32	41,5	79	15	M 30 x 1 L	20	17	14
9017 E	38	45,5	85	16	M 34,5 x 0,75 L	25	22	18
9018 E	35	45	105	15°30'	M 33 x 1	23	20	16
9020 E	36	45	108	15°30'	M 33 x 1,25	21	18	14
9021 E	25	35	92	15°30'	M 25 x 1	16	14	11
9023 E	30	39	77	15	Bajonett	20	17	11
9033 E	40	55,2	102	15	M 35 x 1,5 R o. L	22	19	15
9039 E	46	60,5	112	15	M 40 x 1,5 L	25	22	18
9044 E	45	60,4	159	15	M 40 x 1,5 L	22	19	15
9045 E	45	60,4	159	15	M 40 x 1 L	22	19	15
9046 E	45	60,4	159	15	M 40 x 1,5 L	25	22	18
9047 E	42	50	120	15	M 38 x 1,5	25	22	17
9049 E	46	60,3	112	15	M 40 x 1,5 L	25	22	18
9049 E-1	46	60,3	112	15	M 40 x 1,5 L	25	22	18
9069 E	53	69,4	128	15	M 48 x 1,5 L	32	27	22
9070 E	53	69,3	128	15	M 47 x 1,5 L	32	28	23
9081 E	56	72	131	15	M 52 x 1,5 L	35	30	24
9083 E	56	72,5	130	15	M 52 x 1,5 L	36	31	25
9108 E	62	82,4	178	15	M 58 x 1,5 L	42	36	30
9112 E	62,9	78,3	147	15	M 56 x 1,5 L	40	35	28
9115 E	64	80,5	129	15	M 59 x 1,5 L	42	36	28
9132 E	70	90	149	15	M 65 x 1,5 L	48	41	33
9133 E	70	92	154,5	15,5	M 65 x 2 L	50	43	35
9139 E	75	97,8	175	15	M 68 x 1,5 L	50	43	35
9151 E	75	97,4	165	15	M 68 x 1,5 L	50	43	35
9151 E-1	75	93,4	155	15	M 68 x 1,5 L	50	43	35
9178 E	90	115	170	15	M 85 x 1,5 L	67	58	47
9179 E	90	115,3	200	15	M 82 x 1,5 L	69	59	48
9187 E	89,9	115,3	172	15	M 85 x 1,5 L	69	59	48
9209 E	109	138	189	15	M 102 x 1,5 L	82	70	57
9210 E	109	138,3	230	15	M 100 x 1,5 L	63	54	44
9239 E	128	160,4	250	15	M 122 x 1,5 L	100	87	71

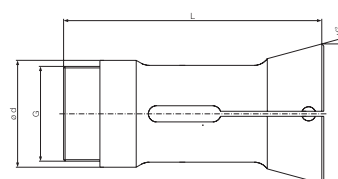
Collets are available for all common machine types.



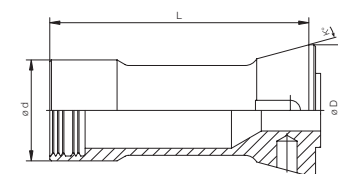
Pic. 1



Pic. 2



Pic. 3



Pic. 4

FEED FINGERS FOR MULTI-SPINDLE AUTOMATIC LATHES

Use:

For feeding forward Workholding bars on multi-spindle automatic lathes.

Bore patterns:

- round grooves
- smooth bores on request

Hardness:

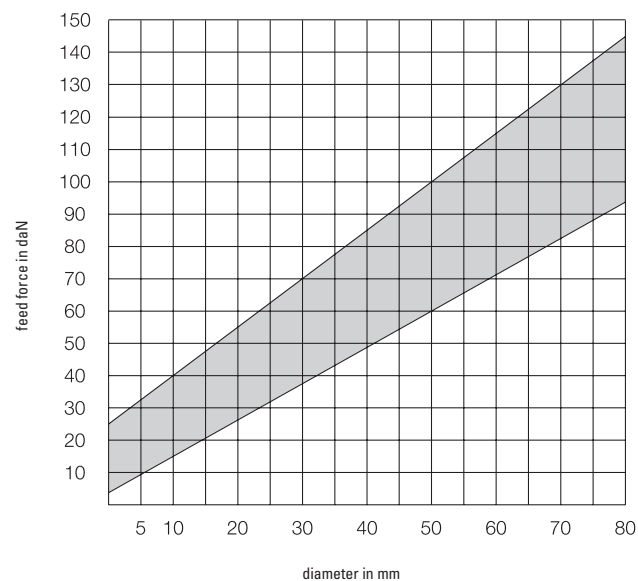
Feed fingers are made from special spring steel. The front component with the clamping bore has a hardness of approx. HRc 60 – where this is not prevented by the partial tempering. The thread and spring areas are hardened to spring temper.

Feed force:

Feed fingers are supplied together with springs attached so that they have a preload at the nominal dimension on the material bars.

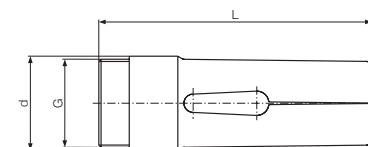
A hardened ground test mandrel with a tolerance of h7 must be used for checking.

Feed fingers with increased feed force can be made for an extra charge.

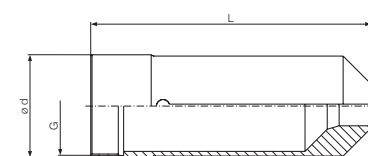


feed fingers for multi-spindle automatic lathes

art. no.	pic.	d	L	thread G	max. diameter		
					○	⬡	□
9251 E	1	17,9	70	M 16 x 0,75	14	12	10
9251 E-1	1	18,3	70	M 17 x 0,75	15	13	10
9254 E	1	23	88	M 21 x 1 R o. L	16	14	11
9255 E	1	25	88	M 32 x 1	19	16	13
9258 E	1	25	90	M 24 x 1	20	17	14
9259 E	2	19,5	82	M 17 x 1	13	11	9
9261 E	1	19,6	82	M 18 x 1	13	11	9
9262 E	1	27	88	M 25 x 1	20	17	14
9263 E	1	29,7	116	M 27 x 1	23	20	16
9265 E	1	22,8	98	M 20 x 0,75	16	14	11
9266 E	1	27,7	116	M 25 x 1	21	18	14
9268 E	1	22	86	M 20 x 1	16	14	11
9273 E	1	30,8	102	M 28 x 1,5 R o. L	22	19	15
9282 E	1	35 (37)	118	M 33 x 1,5	25	22	18
9286 E	1	32	140	M 28 x 1,5 L	22	19	15
9287 E	1	33	140	M 30 x 1 L	25	22	18
9288 E	1	30,5	90	M 28,5 x 0,75	25	22	18
9289 E	1	33,6	140	M 30 x 1 L	25	22	18
9290 E	1	32	115	M 30 x 1 L	25	22	18
9316 E	1	40	136	M 38 x 1,5 L	32	27	22
9319 E	1	41,8	130	M 38 x 1,5	32	28	23
9333 E	1	45	136	M 42 x 1,5 L	35	30	24
9335 E	1	41,2	136	M 38 x 1,5 R o. L	35	30	24
9336 E	1	41,5	136	M 38 x 1,5 R o. L	32	27	22
9364 E	1	54	170	M 50 x 1,5 L	42	36	30
9368 E	1	57	160	M 54 x 1,5 L	48	41	33
9372 E	1	51	174	M 48 x 1,5	40	35	28
9374 E	1	51,5	136	M 48 x 1,5	42	36	28
9401 E	1	60	160	M 57 x 1,5 L	50	43	35
9402 E	1	60	156	M 57 x 2 L	50	43	35
9406 E	1	62 (64)	195	M 58 x 1,5	50	43	35
9447 E	1	77,5	170	M 74 x 1,5 L	67	58	47
9450 E	1	77	205	M 72 x 1,5 L	63	54	44
9456 E	2	78	225	M 75 x 1,5 L	69	59	48
9474 E	1	92,8	233	M 88 x 1,5 L	80	69	56
9475 E	1	94	180	M 88 x 1,5 L	82	70	57
9483 E	1	114	235	M 108 x 1,5 L	100	87	71



Pic. 1

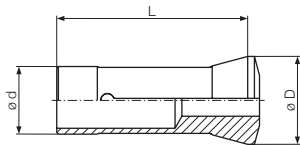


Pic. 2

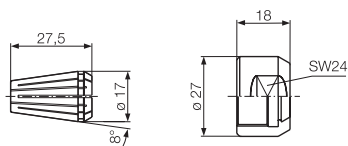
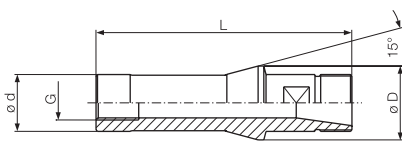
Feed fingers are available for all common machine types.

PICK-UP COLLETS FOR MULTI-SPINDLE AUTOMATIC LATHES

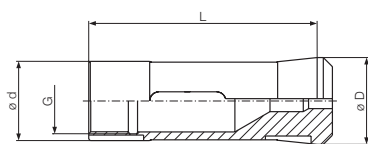
for Gildemeister



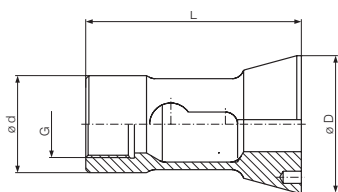
Pic. 1



Pic. 2



Pic. 3



Pic. 4

collet chuck for Gildemeister

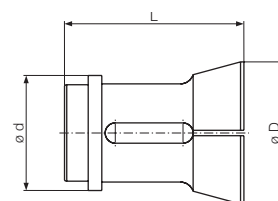
art. no.	pic.	d	D	L	thread G	type
1292 E-F	2	20	26	90	M 20 x 1	AS/GS 20

for Schütte

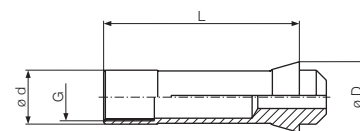
art. no.	pic.	d	D	L	thread G	type
3380 E	4	20	24	38,3	M 16 x 1,5 L	SF 13
3540 E	4	25	35,1	57	M 18 x 1,5 L	SE 16 - SE 18
3607 E	4	28	36	48	M 24 x 1,5 L	SF 20 L
3722 E	4	32	45,1	69,5	M 22 x 1,5 L	SD/SE/VD 25 - SK 26
1495 E	5	34	42	52		SE/SF 26 - AF 40
3790 E	4	39	50,6	79	M 26 x 1,5 L	SD/VD 32
1631 E	8	44	54,1	71		S 36 PC
1700 E	5	52	60,6	60		SF/AF 32 - SF 40 - SF 42
3863 E	4	46	67,2	81,5	M 32 x 1,5 L	SD/VD 50
1739 E	8	59	67	69		S 51 PC
1777 E	5	63	71,6	60		SF/AF 51
1843 E	5	76	88	75		SF/AF 67 - SF 81
3914 E	4	55	88,9	90	M 42 x 1,5 L	VD/SD 63
3917 E	4	55	108	90	M 42 x 1,5 L	VD/SD 80

for Tornos

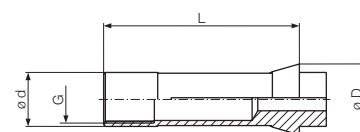
art. no.	Bild	d	D	L	thread G	type
3263 E	6	16	21	66	M 14 x 0,75	AS 14 - SAS 16
3541 E	7	25	35	77	M 22 x 1	BS 20 B
3601 E	10	28	32	68	Bajonett	Multi Deco 20 - 6, 20 - 8
3757 E	10	35,5	40	75	Bajonett	Multi Deco 26 - 6, 32 - 6



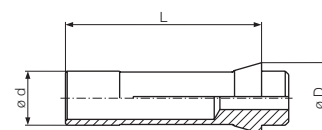
Pic. 5



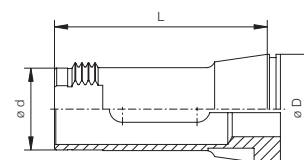
Pic. 6



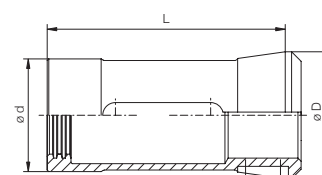
Pic. 7



Pic. 8



Pic. 9



Pic. 10

for Wickman

art. no.	pic.	d	D	L	thread G	type
1261 E	8	19	26	55,6		5/8"
1381 E	8	25,4	38	93,6		1"
1561 E	8	39,7	65	120,6		1.3/8" - 1.3/4"

for ZPS

art. no.	pic.	d	D	L	thread G	type
3756 E	3	35,5	40	80	M 25 x 1	SAY 6/25 - SAY 6/32
1525 E	5	36	45	81,5		SAY 6/25 - SAY 6/32
1621 E	1	42	54	78,5		SAY 6/42

CLAMPING HEADS FOR MULTI-SPINDLES

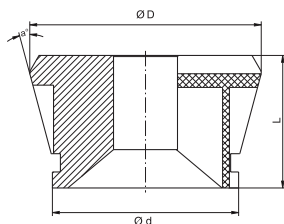


Bild 1

Nann clamping heads are equipped with rubber inserts making changeover possible on-site: extensive vulcanization is no longer necessary. The collet is ready to be used after 15 minutes – an advantage that proves to be decisive in practice.

The clamping heads can be used for workholding clamping, chuck and bar work and for all common axial pulling chucks as well.

for INDEX

art. no.	id.	pic.	d	D	L	max. diameter			type
						○	⬡	□	
9539 E	Spannkopf	1	37,5	60,5	38	26	22	18	MS 25
9542 E	Spannkopf	1	47,2	61	47	32	27	22	MS 32
782 E	Spannkopf	1	54	79,5	47	42	36	30	MS 36 - MS 42 Basic - MS 24 C

for Tornos Bechler

art. no.	id.	pic.	d	D	L	max. diameter			type
						○	⬡	□	
9542 E	Spannkopf	1	47,2	61	47	32	27	22	Multi Deco 26 - 6

for Schütte

art. no.	id.	pic.	d	D	L	max. diameter			type
						○	⬡	□	
9507 E	Spannkopf	1	29,6	42,5	28	18	15	13	SG 18 - AG 20
9539 E	Spannkopf	1	47,5	60,5	38	26	22	18	SE 25 - SE/AF/SF 26 - SF 26S
9550 E	Spannkopf	1	54	78,3	47	42	36	30	AD/SF 40 - AD/SF 42
9564 E	Spannkopf	1	66	98,2	65	50	41	34	SD 50 - AS/SF 51 - SF 51S

for Gildemeister

art. no.	id.	pic.	d	D	L	max. diameter			type
						○	⬡	□	
9506 E	Spannkopf	1	29	42,3	29	20	17	14	AS/GM/GS 20 - AS 16
9508 E	Spannkopf	1	23	45,5	29	25	21	17	AS 20 - 25
9545 E	Spannkopf	1	44,5	69,4	43	32	28	22	AS/GM/GS 32

for Mori Say

art. no.	id.	pic.	d	D	L	max. diameter			type
						○	⬡	□	
9550 E	Spannkopf	1	54	78,3	47	42	36	30	6/32 M - 6/42 CNC

CLAMPING HEADS

Use:

- for workholding clamping
- for bar or chuck work
- for standard chucks

Patterns:

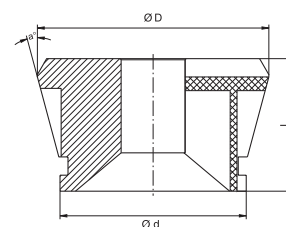
- long version
- short version
- unhardened bore and plane surface

Bore patterns:

- (G): smooth
(LQ): serrated
(Q): with round grooves
(W): unhardened, ca. 42 HRC

size 32

art. no.		D	L	bore pattern			max. diameter			pitch
				LQ	Q	G	○	⬡	□	
772 E	SK 32	57,7	47			*	4 - 7 mm			1
772 E	SK 32	57,7	47		*		8 - 10 mm			1
772 E	SK 32	57,7	47	*			11 - 32 mm			1
772 E	SK 32	57,7	47			*		7 mm	7 mm	
772 E	SK 32	57,7	47		*			8 - 27 mm	8 - 22 mm	1
771 E	SK 32 G	57,7	44			*	4 - 32 mm			1
771 E	SK 32 W	57,7	44			*	5, 15, 20 mm			



size 42

art. no.		D	L	bore pattern			max. diameter			pitch
				LQ	Q	G	○	⬡	□	
782 E	SK 42	79,5	47			*	4 - 7 mm			0,5
782 E	SK 42	79,5	47		*		8 - 10 mm			0,5
782 E	SK 42	79,5	47	*			11 - 42 mm			0,5
782 E	SK 42	79,5	47			*		7 mm	7 mm	
782 E	SK 42	79,5	47		*			8 - 36 mm	8 - 30 mm	1
781 E	SK 42 G	79,5	42			*	4 - 42 mm			0,5
781 E	SK 42 W	79,5	42			*	8, 15, 30 mm			



size 52

art. no.		D	L	bore pattern			max. diameter			pitch
				LQ	Q	G	○	⬡	□	
783 E	SK 52	79,5	46			*	4 - 7 mm			0,5
783 E	SK 52	79,5	46		*		8 - 10 mm			0,5
783 E	SK 52	79,5	46	*			11 - 52 mm			0,5
783 E	SK 52	79,5	46			*		7 mm	7 mm	
783 E	SK 52	79,5	46		*			8 - 45 mm	8 - 36 mm	1
783 E	SK 52 G	79,5	46			*	4 - 52 mm			0,5
783 E	SK 52 W	79,5	46			*	8, 15, 30 mm			



Attachments for turning inside diameters of unhardened clamping heads on request

CLAMPING HEADS

Use:

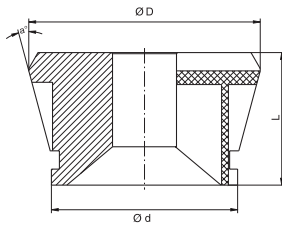
- for workholding clamping
- for bar or chuck work
- for standard chucks

Patterns:

- long version
- short version
- unhardened bore and plane surface

Bore patterns:

- (G): smooth
- (LQ): serrated
- (Q): with round grooves
- (W): unhardened, ca. 42 HRc



size 65

art. no.	D	L	bore pattern			max. diameter			pitch
			LQ	Q	G	○	⬡	□	
788 E	SK 65	99,5	58		*	4 - 7 mm			0,5
788 E	SK 65	99,5	58		*	8 - 10 mm			0,5
788 E	SK 65	99,5	58	*		11 - 65 mm			0,5
788 E	SK 65	99,5	58		*		7 mm		
788 E	SK 65	99,5	58		*		8 - 56 mm	8 - 46 mm	1
787 E	SK 65 G	99,5	53		*	4 - 65 mm			0,5
787 E	SK 65 W	99,5	53		*	8, 20, 40 mm			

size 80

art. no.	D	L	bore pattern			max. diameter			pitch
			LQ	Q	G	○	⬡	□	
791 E	SK 80	114,5	53		*	8 - 10 mm			1
791 E	SK 80	114,5	53	*		11 - 80 mm			1
791 E	SK 80	114,5	53		*		8 - 68 mm	8 - 56 mm	1
791 E	SK 80 G	114,5	53		*	8 - 80 mm			1
791 E	SK 80 W	114,5	53		*	20, 40, 60 mm			

size 100

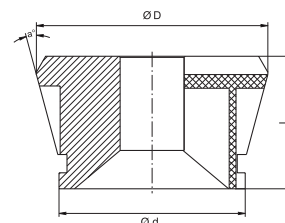
art. no.	D	L	bore pattern			max. diameter			pitch
			LQ	Q	G	○	⬡	□	
797 E	SK 100	144,5	59	*		42 - 100 mm			1
797 E	SK 100	144,5	59		*		50 - 86 mm	50 - 70 mm	1
797 E	SK 100 G	144,5	59		*	42 - 100 mm			1
797 E	SK 100 W	144,5	59		*	30, 45, 65, 90 mm			



size 120

art. no.	D	L	bore pattern			max. diameter			pitch
			LQ	Q	G	○	⬡	□	
798 E	SK 120	180	61	*		62 - 120 mm			1
798 E	SK 120	180	61		*		50 - 104 mm	50 - 85 mm	1
798 E	SK 120 G	180	61		*	62 - 120 mm			1
798 E	SK 120 W	180	61		*	65, 90, 110 mm			

Attachments for turning inside diameters of unhardened clamping heads on request



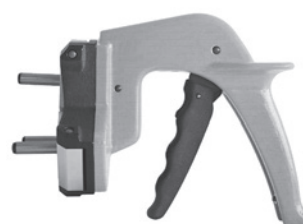
size 140

art. no.	D	L	bore pattern			max. diameter			pitch
			LQ	Q	G	○	⬡	□	
796 E	SK 140	195,6	63	*		140 mm			1,0
796 E	SK 140	195,6	63		*		121 mm	98 mm	1,0

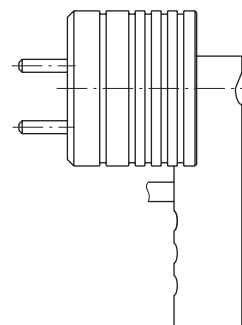
changing fixtures for clamping heads

art. no.	pic.
SK 32 WVM	1
SK 32 WVP	2
SK 42 WVM	1
SK 42 WVP	2
SK 65 WVM	1
SK 65 WVP	2
SK 80 WVM	1
SK 80 WVP	2
SK 100 WVM	1
SK 100 WVP	2

Type WVM is manually operated, type WVP is pneumatically operated



Pic. 1



Pic. 2

DRAW-BACK COLLETS

Use:

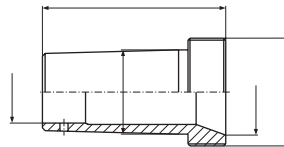
- for workholding clamping on finishing lathes, grinding machines and indexing units
- small axial movement of the collet during the clamping process
- suitable for very short workpieces, because the power is transferred from the clamping sleeve taper to the taper of the collet on their front part.
- stops can be supplied

Bore patterns:

smooth

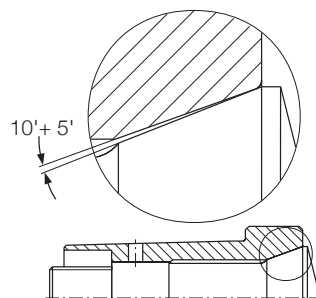
Mounting sleeves:

Mounting sleeves according to DIN 6341 or something similar are available for the draw-back collets. When making an inquiry or an order, please supply us with details on the mounting taper and type of collet.



Taper angle of the clamping sleeve:

The taper of the clamping sleeve should be 15' (one-sided) flatter than the taper angles given in the tables. This frees the collets on release.



Hardness:

The collets are made from a special spring steel. Where possible, by partial tempering, the hardness of the taper and clamping bore is approx. HRC 60.

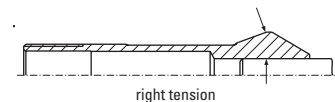
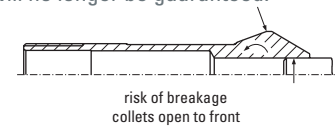
Taper grinding:

For some types the clamping taper is lightly ground at the slot edges to ease removal of the collet from the mounting taper thus making possible low undersized clamping.

Extended collets (long-nose collets):

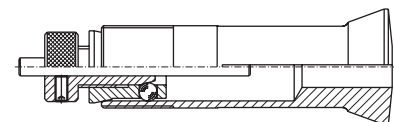
If the collet has to be extended towards the front in order to support the Workholding, it must

be ensured that the clamping point reaches into the taper of the collet. If the clamping point lies in front of the collet taper, the nose of the collet will open towards the front. Under these circumstances, running concentricity (truth) will no longer be guaranteed.



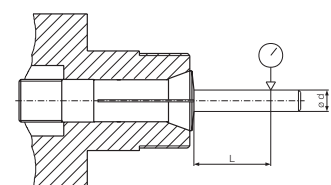
Stops for collets:

Adjustable stops which are easily fitted into the rear bore of the collet are available for standard models.



running concentricity

clamping diameter		testing point	running concentricity	
d from	d to	L	standard	high precision
1	1,6	6	0,02	0,01
1,6	3	10	0,02	0,01
3	6	16	0,02	0,01
6	10	25	0,02	0,01
10	18	40	0,03	0,015
18	24	50	0,04	0,02
24	30	60	0,04	0,02



similar to DIN 6341

drawback collets

art. no.	pic.	d	D	L	K°	thread G	max. diameter
302 E	1	8	13	34	20	6,85 x 0,625	6
303 E	1	9,3	15	50	21	8,25 x 1/32"	7,5
313 E	1	10	14,5	73	20	M 9,2 x 1	8
314 E	1	10	14	41,5	15	S 9.83 x 0,833	8
318 E	1	12	16	43,5	15	S 11,75 x 1,25	10
319 E	1	12	18	60	20	Tr 12 x 1	10
3213 E	1	15	20,2	58,3	15	14,75 x 1,25	12,5
324 E	1	15	21,5	53	20	M 13 x 1	13
330 E	1	16	24	70	20	Tr 16 x 1,5	13
349 E	1	20	26,3	69	15	S 19,7 x 1,667	20
350 E	1	20	27,5	117	20	M 18,5 x 1,4	18
351 E	1	20	28	80	20	Tr 20 x 1,5	17,5
354 E	1	20	28	117	17,5	19 x 1/20"	17,5
355 E	1	20	28	117,5	17,5	S 20 x 2	18
358 E	1	23	32	82	20	21,1 x 1	20
359 E	1	23	32	90	20	Tr 23 x 1,5	20
369 E	2	24,12	32	101,5	8,5	7/16" x 1/20"	20
363 E	1	25	33,5	84	16	M 23 x 1	22
364 E	1	25	34	92,5	15	S 25 x 1/15"	22
366 E	1	28	36	102	18	Tr 27 x 1/20"	25
367 E	1	28	38	100	20	Tr 28 x 1,5	24
385 E	1	31,75	37,5	83	10	31,45 x 1/20"	26
3713 E	1	32	40	100	15	S 29,7 x 1/15"	30
386 E	1	32	45	110	20	Tr 32 x 1,5	29
3838 E	1	45	53	109	15	M 42 x 1,5	40
389 E	1	45	60	140	20	Tr 45 x 2	40
390 E	1	47	60	110	20	Tr 47 x 1,5	42

Highlighted art. no. according to DIN 6341

type NK

art. no.	d	D	L	K°	thread G	max. diameter
637 E	16	24,5	58	24	M 16 x 1	12
666 E	25	35,5	67	20	M 25 x 1	21
667 E	36	46,5	72,5	20	M 36 x 1,5	31
668 E	50	62,5	98	20	M 50 x 2	43
669 E	60	73,5	101	20	M 60 x 2	52

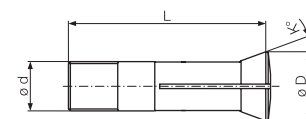


Bild 1

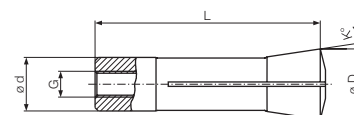
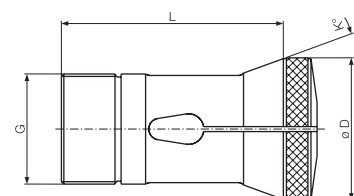


Bild 2



EMERGENCY COLLETS

Use:

Emergency collets are used for holding smaller series workpieces when no standard collet is available. Unlike the standard collet, with its hardened taper and clamping bore, emergency collets only have a hardness of approx. HRc 45. The customer can therefore enlarge the bore of the collet.

To enlarge the bore, the emergency collet is clamped on a bolt in the rear of the clamping bore or on pins in the slots and turned out in this position.

Note:

The centrifugal force resulting at high speeds can lead to a lessening of the clamping power and, in extreme case, breaking of the collets.

Please follow accident-prevention instructions.

Special features:

- deadlength collets (**pic. 1**) with a hardness of HRc 45 are available for collet types 140 E, 148 E, 161 E, 163 E, 173 E and 185 E, further types on request.

deadlength collets, HRc 45

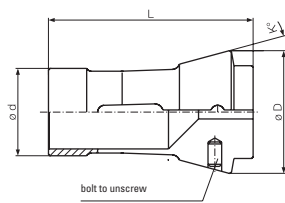
art. no.	pic.	d	D	L	K°
140 E - 0.0	1	22	30	55	15
148 E - 0.0	1	28	38	70	15
163 E - 0.0	1	32	45	75	15
163 E - 0.0	1	35	48	80	15
173 E - 0.0	1	48	60	94	15
185 E - 0.0	1	66	84	110	15

- deadlength collets (**pic. 2**), short version: see standard collets
- deadlength collets (**pic. 3**), enlarged and extended versions: these deadlength collets are able to clamp large and short workpieces.

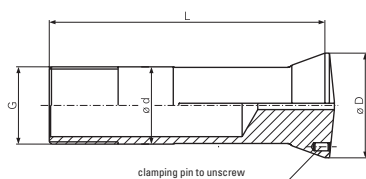
draw-back collets, HRc 45

art. no.	pic.	D1	L1
Gr. 0.0	2		
Gr. 0.1	3		25
Gr. 1.1	3	40	25
Gr. 1.2	3	40	50
Gr. 2.1	3	50	25
Gr. 2.2	3	50	50
Gr. 3.1	3	75	25
Gr. 3.2	3	75	50
Gr. 4.1	3	100	25
Gr. 4.2	3	100	50

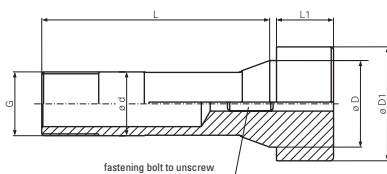
Draw-back collets with a hardness of HRc 45 are available for collet types 349 E, 358 E, 369 E, 363 E, 364 E, 366 E, 367 E, 385 E and 386 E with various head sizes.



Pic. 1



Pic. 2



Pic. 3



COLLETS FOR ROTARY TRANSFER MACHINES – HYDROMAT

Use:

- for workholding clamping
- no axial movement while chuck is clamping
- suitable for very short workpieces because the power is transferred from the clamping sleeve taper to the taper of the collet on their front part.

Bore patterns:

smooth

Hardness:

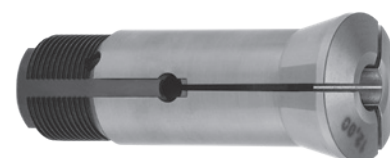
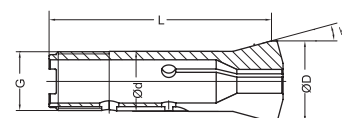
The collets are made from special spring steel. Where possible, by partial tempering, the hardness of the taper and the clamping bore is HRC 58 - 60.

Special features:

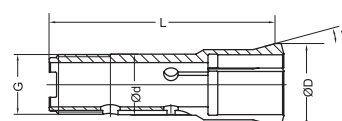
- the complete set of collets is adjusted in its length
- all collets with high running concentricity
- additional cross keyway in shank on request
- with profiled bored collets, position of shank keyway in relation to profiled bored bore is very important
- square, hex. and other profiled bored bores are eroded – higher running concentricity
- clamping bore expanded by 0.5 mm
- workpiece stops can be supplied

for Hydromat

art. no.	pic.	d	D	L	K°	thread G	max. diameter
3490 E	2	20	26,3	92,5	15	S 19,7 x 1,667	20
3640 E	1	25	33,7	92,5	15	S 24,7 x 1/15"	22
3640 E	2	25	33,7	92,5	15	S 24,7 x 1/15"	25
3714 E	1	32	40	100	15	S 29,7 x 1/15"	32
3727 E	2	32	53	116	15	S 29,7 x 1/15"	45
3839 E	1	45	53	109	15	M 42 x 1,5	45
3854 E	2	45	68	129	15	M 42 x 1,5	55

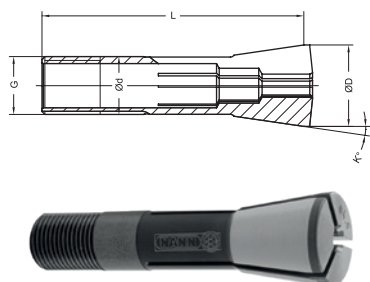


Pic. 1

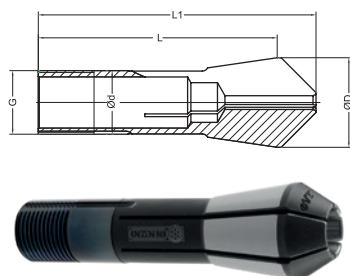


Pic. 2

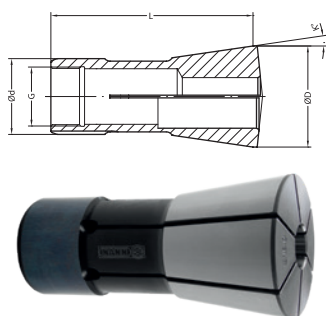
DRAW-BACK COLLETS, HIGH PRECISION



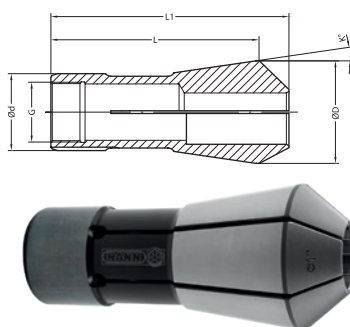
Pic. 1



Pic. 2



Pic. 3



Pic. 4

Use:

- for Workholding clamping on tool grinding machines
- small axial movement of the collet during the clamping process
- suitable for very short workpieces, except extended version
- very high running concentricity
- for automatic loading
- all types available in standard length and extended version

Bore patterns:

smooth

Hardness:

The collets are made from a special spring steel. Where possible, by partial tempering, the hardness of the taper and clamping bore is approx. HRc 60.

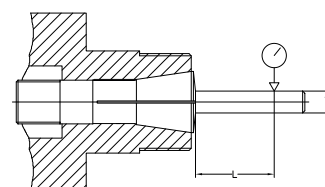
high precision

art. no.	pic.	d	D	L	L1 max.	K°	thread G	max. diameter ○	pitch
3148 E	1	12	18	63		8° 17' 50"	Tr 12 x 1	10	0,5
3148 E - V	2	12	18	63	76	8° 17' 50"	Tr 12 x 1	10	0,5
3409 E	1	20	28	90		8° 17' 50"	Tr 20 x 1,5	16	0,5
3409 E - V	2	20	28	90	106	8° 17' 50"	Tr 20 x 1,5	16	0,5
3718 E	1	32	45	120		8° 17' 50"	Tr 32 x 1,5	27	0,5
3718 E - V	2	32	45	120	148	8° 17' 50"	Tr 32 x 1,5	27	0,5
3851 E	3	45	60	120		8° 17' 50"	Tr 35 x 1,5	36	1
3851 E - V	4	45	60	120	145	8° 17' 50"	Tr 35 x 1,5	36	1

Collets 3148 E, 3409 E, 3718 E also available with additional internal thread

running concentricity: draw-back collets, high precision

clamping diameter		testing point L	running concentricity standard
d from	d to		
1	1,6	5	0,005
1,6	3	10	0,005
3	6	16	0,005
6	10	25	0,005
10	18	30	0,005
18	24	30	0,005
24	36	30	0,005



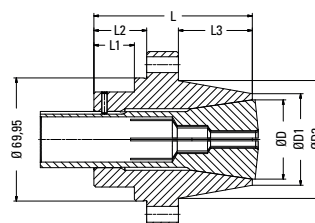
similar to DIN 6343

CHUCKS FOR DRAW-BACK COLLETS, HIGH PRECISION

- for draw-back collets, high precision
- simple design
- case hardened
- very high accuracy
- cylindrical fixture
- for spindles with rotating hydraulic or pneumatic cylinders

chucks

art. no.	pic.	D	D1	D2	L	L1	L2	L3	collets
2.7400.2.001.000	5	18	22	70	75		7	52	3148 E
2.7400.2.001.010	5	18	22	69	105		7	82	3148 E
2.7400.2.002.000	5	28	34	70	75		7	52	3409 E
2.7400.2.002.010	5	28	34	69	105		7	82	3409 E
2.7400.2.003.000	5	45	52	67	90	23	30	42	3718 E
2.7400.2.003.010	5	45	52	68	97		7	74	3718 E
2.7400.2.004.000	5	60	70	70	105	38	45	44	3851 E



Pic. 5

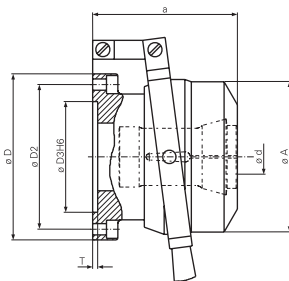


TYPE SSF LEVER-OPERATED COLLET CHUCKS



- ready-to-install keyless chucks for steel and rubber collets
- workholding clamping while the spindle is running
- efficient use even for small batches
- versatile use on all types of machine tools
- simple, unbalance-free design with ball-type power transmission
- excellent clamping force thanks to favorable transmission ratios
- high precision in continuous operation thanks to hardened parts
- small dimensions with large material throughput
- no axial displacement of the workpieces, as tension is applied to pressure

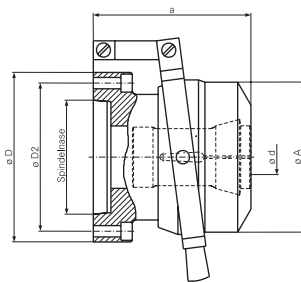
with cylindrical flange



art. no.	clamping range	D	a	A	D3		fixing screws	D2	steel collets	rubber collets
SSF 16 Z	1 - 16	69	73	66	42		4 x M 5	57	140 E	series 12
SSF 20 Z	2 - 24	88	93	85	54		6 x M 6	74	148 E	series 18
SSF 30 Z	2 - 30	105	106	104	72		6 x M 6	90	163 E	series 24
SSF 40 Z	3 - 42	122	110	129	88		8 x M 6	107	173 E	series 36
SSF 60 Z	4 - 60	150	128	154	115		8 x M 8	131	185 E	series 52
SSF 80 Z	20 - 80	178	150	180	130		8 x M 8	158	193 E	-

Collet chucks are supplied without connecting parts.

with flange for spindle-noses



art. no.	clamping range	D	a	A	D3	DIN 55021/22/27/28 Camblok C	fixing screws	D2	steel collets	rubber collets
SSF 30/5	2 - 30	135	120	104		5	4 x M 10	104,8	163 E	series 24
SSF 40/5	3 - 42	135	122	129		5	4 x M 10	104,8	173 E	series 36
SSF 40/C 5	3 - 42	135	123	129		C 5	4 x M 12 x 1,5	104,8	173 E	series 36
SSF 40/6	3 - 42	170	125	129		6	4 x M 12	133,4	173 E	series 36
SSF 40/C 6	3 - 42	170	127	129		C 6	6 x M 16 x 1,5	133,4	173 E	series 36
SSF 60/6	4 - 60	170	140	154		6	4 x M 12	133,4	185 E	series 52
SSF 60/C 6	4 - 60	170	146	154		C 6	6 x M 16 x 1,5	133,4	185 E	series 52
SSF 60/8	4 - 60	220	143	154		8	4 x M 16	171,4	185 E	series 52

Collet chucks are supplied without connecting parts.

TYPE KSFM POWER-OPERATED COLLET CHUCKS

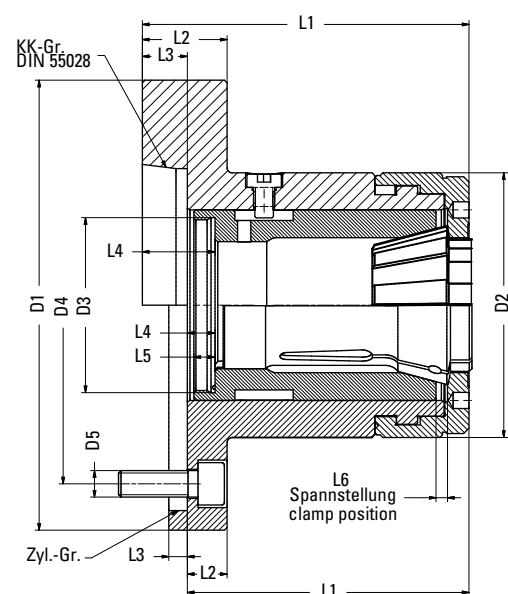
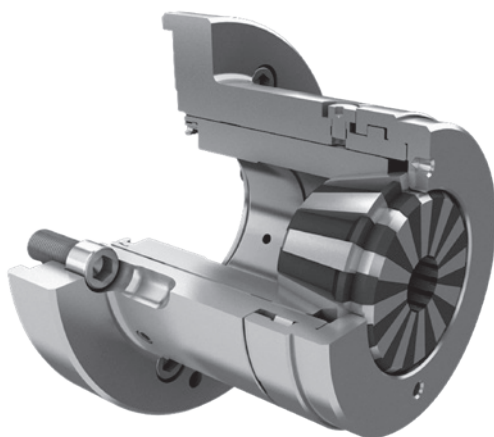
- for spindles with rotary hydraulic or pneumatic cylinders
- for steel collets
- for rubber collets
- replacement parts for using smaller collets
- no axial displacement of workpieces, as tension is applied to pressure
- short changeover times, as collets can be changed using a bayonet lock

with cylindrical flange

art. no.	cylindrical size	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	speed max (min-1)	steel collets	rubber collets
KSFM 26Z/100	Z 100	112	85	M50 x 1,5	82,6	3 x M10	97,5	24	6	16	8	2	6000	161 E	series 20
KSFM 30Z/100	Z 100	112	85	M50 x 1,5	82,6	3 x M10	97,5	24	6	16	8	2	6000	163 E	series 24
KSFM 40Z/88	Z 88	132	100	M66 x 1,5	115	6 x M8	113,4	17	4	14	8	2,5	6000	173 E	series 36
KSFM 40Z/140	Z 140	155	100	M66 x 1,5	104,8	3 x M10	107,5	17	6	12	8	2,5	6000	173 E	series 36
KSFM 60Z/115	Z 115	154	130	M90 x 1,5	136	8 x M8	127,5	11	4	13	8	2,5	5000	185 E	series 52
KSFM 60Z/170	Z 170	185	130	M90 x 1,5	133,4	6 x M12	133	24	6	18,5	8	2,5	5000	185 E	series 52
KSFM 60Z/220	Z 220	235	130	M90 x 1,5	171,4	6 x M16	135	26	6	20,5	8	2,5	5000	185 E	series 52

with flange for spindle-noses

art. no.	spindle nose size	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	speed max (min-1)	steel collets	rubber collets
KSFM 26/4	A2 - 4	112	85	M50 x 1,5	82,6	3 x M10	103,4	30	13	22	8	2	6000	161 E	series 20
KSFM 30/4	A2 - 4	112	85	M50 x 1,5	82,6	3 x M10	103,4	30	13	22	8	2	6000	163 E	series 24
KSFM 40/5	A2 - 5	135	100	M66 x 1,5	104,8	4 x M10	123,5	27	16	28	8	2,5	6000	173 E	series 36
KSFM 40/6	A2 - 6	170	100	M66 x 1,5	133,4	4 x M12	123,5	34	18	28	8	2,5	6000	173 E	series 36
KSFM 60/6	A2 - 6	170	130	M90 x 1,5	133,4	4 x M12	145	27	18	30,5	8	2,5	5000	185 E	series 52
KSFM 60/8	A2 - 8	220	130	M90 x 1,5	171,4	4 x M16	145,9	37,5	20	31,5	8	2,5	5000	185 E	series 52
KSFM 80/8	A2 - 8	220	156	M114 x 2	171,4	6 x M16	176,4	35	19	41	11	6,5	4000	193 E	-

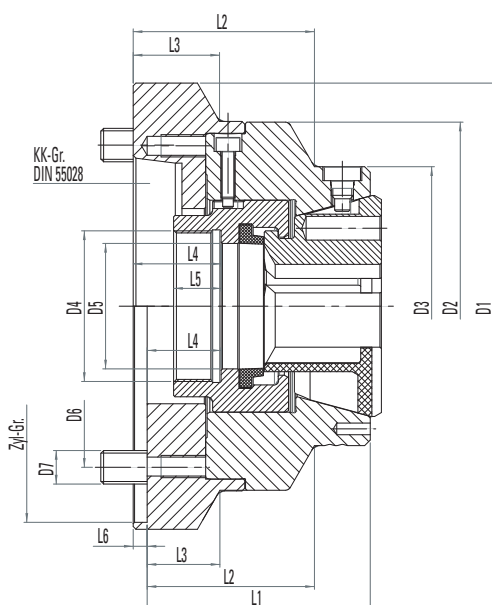




TYPE KSKF POWER-OPERATED COLLET CHUCKS

The innovative collet chucks feature short changeover times from external to internal clamping and high degrees of precision and rigidity.

- for workholding clamping of bar and chucking works
- highest clamping forces and rigidity (types KSKF, KSKF-A)
- axially fixed clamping head, less rigidity (type KSKF-AF)
- quick change capability of clamping heads



Drawback collet chuck with through-hole (type KSKF) for bar machining: the clamping head is pulled into the chuck during clamping and provides high clamping forces and high rigidity. The collet chucks work very precisely and feature an easy set-up as well as high running accuracy.

with cylindrical adapter flange, drawback collet chuck with through-hole

art. no.	size	cylindrical size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	max. speed min ⁻¹ *
KSKF 42 Z140	42	140	150	132	100	M54 x 1,5	45	104,8	M10 (3x120°)	75	55	15	21,5	17	6	7000
KSKF 65 Z140	65	140	157	—	122	M78 x 1,5	68,5	108,5	M10 (3x120°)	100	70	—	39	17,5	5	6000
KSKF 65 Z170	65	170	180	157	122	M78 x 1,5	68,5	133,4	M12 (6x60°)	98	68	13	37	17,5	5	6000
KSKF 100 Z170	100	170	215	—	180	M95 x 2	87	133,4	M12 (6x60°)	110	89	—	31	25	6	5000
KSKF 100 Z220	100	220	230	215	180	M95 x 2	87	171,4	M16 (6x60°)	110	89	31,5	31	25	6	5000

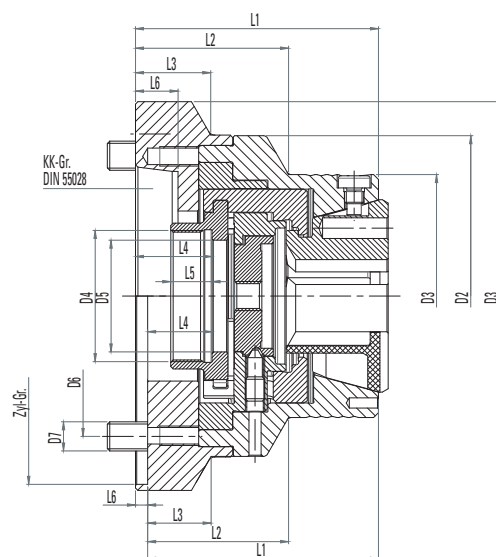
*unbalanced

with short taper holder, drawback collet chuck with through-hole

art. no.	size	spindel nose size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	max. speed min ⁻¹ *
KSKF 42/5	42	A2-5	132	—	100	M54 x 1,5	45	104,8	M10 (4x90°)	90	70	—	36,5	17	16,5	7000
KSKF42/6	42	A2-6	160	132	100	M54 x 1,5	45	133,4	M12 (4x90°)	90	70	36	36,5	17	17,5	7000
KSKF 65/5	65	A2-5	157	—	122	M78 x 1,5	68,5	104,8	M10 (4x90°)	100	70	—	39	17,5	19	6000
KSKF 65/6	65	A2-6	157	—	122	M78 x 1,5	68,5	133,4	M12 (4x90°)	98	68	—	37	17,5	17,5	6000
KSKF 65/8	65	A2-8	202	157	122	M78 x 1,5	68,5	171,4	M16 (4x90°)	102	72	47	41	17,5	20	6000

*unbalanced

Same as type KSKF, but with an **additional stop for chuck parts which can be screwed on**: the clamping head offers high clamping forces and high rigidity as well. Due to the axial pulling effect, the workpiece is pulled against the stop and provides an additional workpiece support. Therefore, the type **KSKF-A** is perfect with short clamped workpieces.



with cylindrical adapter flange, drawback collet chuck with rigid axial stop

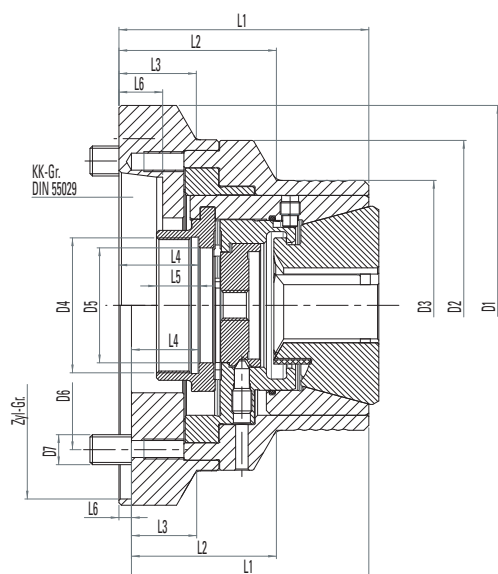
art. no.	size	cylindrical size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	max. speed min ⁻¹ *
KSKF-A 42 Z140	42	140	150	132	100	M54 x 1,5	46	104,8	M10 (3x120°)	90	53	15	21,5	17	6	7000
KSKF-A 65 Z140	65	140	157	—	122	M78 x 1,5	68	104,8	M10 (3x120°)	112	69	—	39	17,5	5	6000
KSKF-A 65 Z170	65	170	180	157	122	M78 x 1,5	68	133,4	M12 (6x60°)	110	67	13	37	17,5	5	6000
KSKF-A 80 Z140	80	140	185	175	140	M78 x 1,5	74	104,8	M10 (3x120°)	130	87	43	39	17,5	5	5500
KSKF-A 80 Z220	80	220	230	175	140	M94 x 1,5	85	171,4	M16 (6x60°)	119	76	32	30,5	17,5	6	5500
KSKF-A 100 Z170	100	170	215	—	180	M95 x 2	87	133,4	M12 (6x60°)	159	138	—	31	25	6	3800
KSKF-A 100 Z220	100	220	230	215	180	M115 x 2	107	171,4	M16 (6x60°)	159	138	31	31	25	6	3800

*unbalanced

with short taper holder, drawback collet chuck with rigid axial stop

art. no.	size	spindel nose size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	max. speed min ⁻¹ *
KSKF-A 42-A5	42	A2-5	132	—	100	M54 x 1,5	46	104,8	M10 (4x90°)	105	68	—	36,5	17	16,5	7000
KSKF-A 42-A6	42	A2-6	160	132	100	M54 x 1,5	46	133,4	M12 (4x90°)	105	68	36	36,5	17	17,5	7000
KSKF-A 65-A5	65	A2-5	157	—	122	M78 x 1,5	68	104,8	M10 (4x90°)	112	69	—	39	17,5	19	6000
KSKF-A 65-A6	65	A2-6	157	—	122	M78 x 1,5	68	133,4	M12 (4x90°)	110	67	—	37	17,5	17,5	6000
KSKF-A 65-A8	65	A2-8	202	157	122	M78 x 1,5	68	171,4	M16 (4x90°)	114	71	47	41	17,5	20	6000
KSKF-A 80-A6	80	A2-6	185	175	140	M94 x 1,5	85	133,4	M12 (4x90°)	125	82	38	36,5	17,5	17,5	5500
KSKF-A 80-A8	80	A2-8	202	175	140	M94 x 1,5	85	171,4	M16 (6x60°)	130	87	43	41,5	17,5	20	5500

*unbalanced



Type **KSKF-AF** is equipped **with a fixed clamping head** and can be used for through as well as for stop clamping. The pressure sleeve is pushed over the axially fixed clamping head. Type KSKF-AF offers a lesser stiffness than that achieved with types KSKF and KSKF-A.

with cylindrical adapter flange, fixed clamping head

art. no.	size	cylindrical size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	max. speed min ⁻¹ *
KSKF-AF 32 Z120	32	120	130	100	75,5	M40 x 1,5	33	102	M8 (6x60°)	83	49	15	17	15	6	8000
KSKF-AF 42 Z140	42	140	150	132	100	M54 x 1,5	46	104,8	M10 (3x120°)	90	53	15	22	17	6	7000
KSKF-AF 65 Z140	65	140	157	—	122	M78 x 1,5	68	104,8	M10 (3x120°)	112	69	—	39,5	17,5	5	6000
KSKF-AF 65 Z170	65	170	180	157	122	M78 x 1,5	68	133,4	M12 (6x60°)	110	67	13	37,5	17,5	5	6000
KSKF-AF 80 Z140	80	140	185	175	140	M78 x 1,5	74	104,8	M10 (3x120°)	130	87	43	39,5	17,5	5	5500
KSKF-AF 80 Z170	80	170	185	175	140	M94 x 1,5	85	133,4	M12 (6x60°)	120	77	33	32	17,5	5	5500
KSKF-AF 80 Z220	80	220	230	175	140	M94 x 1,5	85	171,4	M16 (6x60°)	119	76	32	31	17,5	6	5500

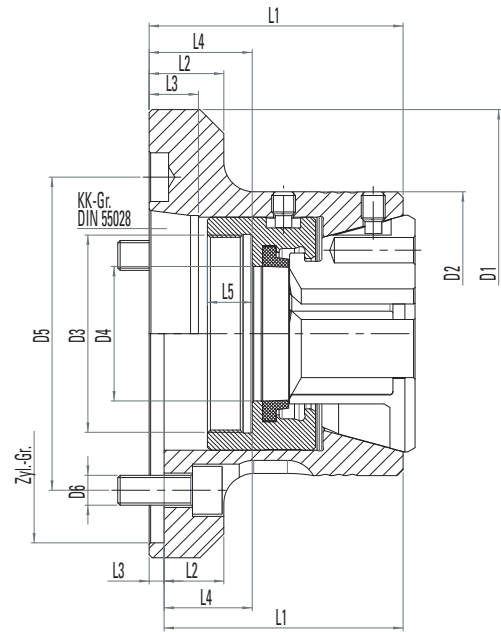
*unbalanced

with short taper holder, fixed clamping head

art. no.	size	spindel nose size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6	max. speed min ⁻¹ *
KSKF-AF 32-A4	32	A2 - 4	105	100	75,5	M40 x 1,5	33	82,6	M10 (3x120°)	100,8	65,8	50	34,5	15	14,5	8000
KSKF-AF 32-A5	32	A2 - 5	130	100	75,5	M40 x 1,5	33	104,8	M10 (3x120°)	100,8	65,8	26	34,5	15	16,5	8000
KSKF-AF 42-A5	42	A2 - 5	132	—	100	M54 x 1,5	46	104,8	M10 (4x90°)	105	68	—	37	17	16,5	7000
KSKF-AF 42-A6	42	A2 - 6	160	132	100	M54 x 1,5	46	133,4	M12 (4x90°)	105	68	36	37	17	17,5	7000
KSKF-AF 65-A5	65	A2 - 5	157	—	122	M78 x 1,5	68	104,8	M10 (4x90°)	112	69	—	39,5	17,5	19	6000
KSKF-AF 65-A6	65	A2 - 6	157	—	122	M78 x 1,5	68	133,4	M12 (4x90°)	110	67	—	37,5	17,5	17,5	6000
KSKF-AF 65-A8	65	A2 - 8	202	157	122	M78 x 1,5	68	171,4	M16 (4x90°)	114	71	47	41,5	17,5	20	6000
KSKF-AF 80-A6	80	A2 - 6	185	175	140	M94 x 1,5	85	133,4	M12 (4x90°)	125	82	38	37	17,5	17,5	5500
KSKF-AF 80-A8	80	A2 - 8	202	175	140	M94 x 1,5	85	171,4	M16 (6x60°)	130	87	43	42	17,5	20	5500

*unbalanced

The **KSKF-SL collet chuck with through-hole** impress with their compact design and low weight – ideal for bar machining on the main spindle. Thanks to their significantly reduced mass and lower moment of inertia, they offer noticeably higher efficiency. The minimized interfering contours ensure better accessibility to the workpiece. In addition, sizes 42 and 52 allow speeds of up to 8,000 rpm¹. The chucks are completely sealed, extremely low-maintenance, and particularly easy to convert.



with cylindrical adapter flange, drawback collet chuck with through-hole

art. no.	size	cylindrical size	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	weight	max. speed min ¹ *
KSKF-SL 42 Z140	42	140	150	95	M66 x 1,5	45	104,8	M 10 (3x120°)	70	17	19,5	15	5	3,4	8000
KSKF-SL 52 Z140	52	140	150	95	M66 x 1,5	55	104,8	M 10 (3x120°)	70	17	17,5	15	5	3,3	8000
KSKF-SL 65 Z170	65	170	180	113	M90 x 1,5	70	133,4	M12 (6x60°)	80	20	19	15	5	5	6000

*unbalanced

with short taper holder, drawback collet chuck with through-hole

art. no.	size	spindel nose size	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	weight	max. speed min ¹ *
KSKF-SL 42/5	42	A2-5	130	95	M66 x 1,5	45	104,8	M10 (4x90°)	85	20	34,5	15	16,5	3,2	8000
KSKF-SL 42/6	42	A2-6	160	95	M66 x 1,5	45	133,4	M12 (4x90°)	85	30	34,5	15	17,5	4,8	8000
KSKF-SL 52/5	52	A2-5	130	95	M66 x 1,5	55	104,8	M10 (4x90°)	85	20	32,5	15	16,5	3,1	8000
KSKF-SL 52/6	52	A2-6	160	95	M66 x 1,5	55	133,4	M12 (4x90°)	85	30	32,5	15	17,5	4,7	8000
KSKF-SL 65/6	65	A2-6	160	113	M90 x 1,5	70	133,4	M12 (4x90°)	95	25	34	15	17,5	4,7	6000
KSKF-SL 65/8	65	A2-8	202	113	M90 x 1,5	70	171,4	M16 (4x90°)	100	35	39	15	20	7,8	6000
KSKF-SL 80/8	80	A2-8	202	130	M102 x 1,5	85	171,4	M16 (6x60°)	100	35	39	15	20	8,2	6000

*unbalanced

THROUGH-HARDENED CLAMPING HEADS WITH EXCHANGEABLE RUBBER INSERTS

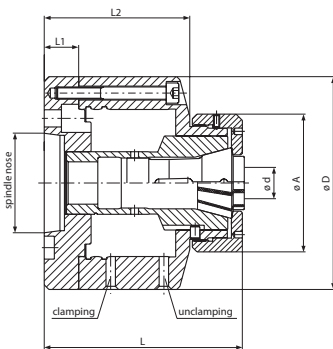
Nann clamping heads are equipped with rubber inserts making changeover possible on-site: extensive vulcanization is no longer necessary. The collet is ready to be used after 15 minutes – an advantage that proves to be

decisive in practice. The clamping heads can be used for workholding clamping, chuck and bar work and for all common axial pulling chucks as well.

You will find our clamping heads starting on page 22.



TYPE PSF POWER-OPERATED COLLET CHUCKS



- mechanical power transmission
- high clamping power
- hardened and ground housing
- constant clamping force
- fatigue-proof clamping
- full spindle capacity as the clamping cylinder is integrated in the chuck

The mechanical power transmission is designed in a way that, when clamped, the chucks are self-locking. The self-locking device only operates within a small range. For this reason, only workpieces within range of tolerance group IT 9 can be clamped safely. Due to the self-locking device, compressed air is required for clamping and release.

Type PSF for operation with a compressed-air gun

The chuck has two holes into which compressed air can be fed from a compressed-air gun for

clamping and release. After the clamping procedure the chuck remains clamped.

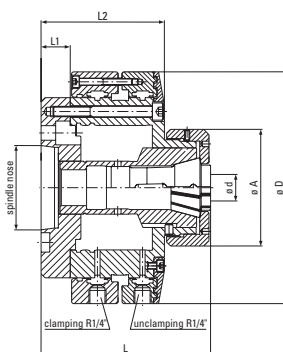


art. no.	spindle nose	D	A	L	L1	L2	clamping range	steel collets	rubber collets
PSF 15	Gr. 3 DIN 55026	100	72	126	22	95	1 - 16	140 E	series 12
PSF 25	Gr. 4 DIN 55026	136	88	128	22	93	2 - 26	161 E	series 20
PSF 40	Gr. 5 DIN 55026	160	112	149	25	107	3 - 42	173 E	series 36
PSF 60	Gr. 6 DIN 55026	196	128	159	25	117	4 - 60	185 E	series 52

Type PSF-SR rotating collet chucks with supply ring

These chucks are equipped with a permanently connected supply ring and sealing through which the compressed air is applied during clamping and unclamping. Clamping and loosening can only take place with the spindle

stationary as the seal lies on the chuck body and produces a high degree of friction. For safety reasons an appropriate protective device must be provided.



art. no.	spindle nose	D	A	L	L1	L2	clamping range	steel collets	rubber collets
PSF - SR 15	Gr. 3 DIN 55026	140	72	126	22	95	1 - 16	140 E	series 12
PSF - SR 25	Gr. 4 DIN 55026	175	88	128	22	93	2 - 26	161 E	series 20
PSF - SR 40	Gr. 5 DIN 55026	204	112	149	25	107	3 - 42	173 E	series 36
PSF - SR 60	Gr. 6 DIN 55026	250	128	159	25	117	4 - 60	185 E	series 52



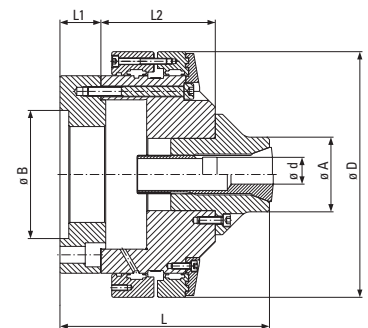
TYPE PSF-ZT POWER-OPERATED COLLET CHUCKS

- high clamping power without clamping cylinder
- clamping via disk springs
- unclamping via compressed air
- permanently connected supply ring for compressed air
- fatigue-proof clamping
- for drawback collets
- simple mounting
- for internal clamping too

Because of clamping via disk springs the chuck is always clamped, so the chuck is self-locking. For unclamping compressed air is required. These chucks are equipped with a permanently connected supply ring and sealing through which the compressed air is applied during clamping and unclamping. Clamping can only take place with the spindle stationary as the seal lies on the chuck body and produces a high degree of friction. For safety reasons an appropriate device must be provided.

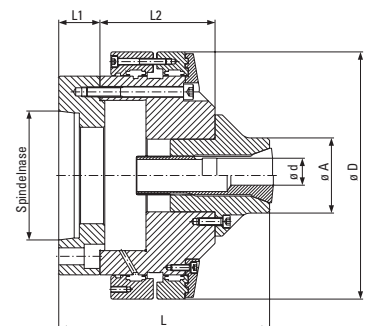
with cylindrical flange

art. no.	B	D	A	L	L1	L2	clamping range	collet type
PSF 23 - ZT - Z 42	42	175	42	148	14	95	1,5 - 20	359 E
PSF 28 - ZT - Z 72	72	204	55	156	22	95	1,5 - 24	367 E
PSF 32 - ZT - Z 72	72	204	62	192	22	95	1,5 - 29	386 E
PSF 47 - ZT - Z 88	88	204	80	164	22	95	5 - 42	390 E



with flange for spindle-noses DIN 55026

art. no.	spindle nose	D	A	L	L1	L2	clamping range	collet type
PSF 23 - ZT - 4	Gr.4 DIN 55026	175	42	156	22	95	1,5 - 20	359 E
PSF 28 - ZT - 4	Gr.4 DIN 55026	204	55	152	20	95	1,5 - 24	367 E
PSF 28 - ZT - 5	Gr.5 DIN 55026	204	55	152	20	95	1,5 - 24	367 E
PSF 32 - ZT - 5	Gr.5 DIN 55026	204	62	160	20	95	1,5 - 29	386 E
PSF 32 - ZT - 6	Gr.6 DIN 55026	204	62	164	24	95	1,5 - 29	386 E
PSF 47 - ZT - 5	Gr.5 DIN 55026	204	80	176	34	95	5 - 42	390 E
PSF 47 - ZT - 6	Gr.6 DIN 55026	204	80	176	34	95	5 - 42	390 E

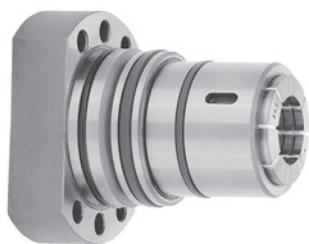


TYPE HESK, TYPE HESK-R COLLET CLAMPING ATTACHMENTS

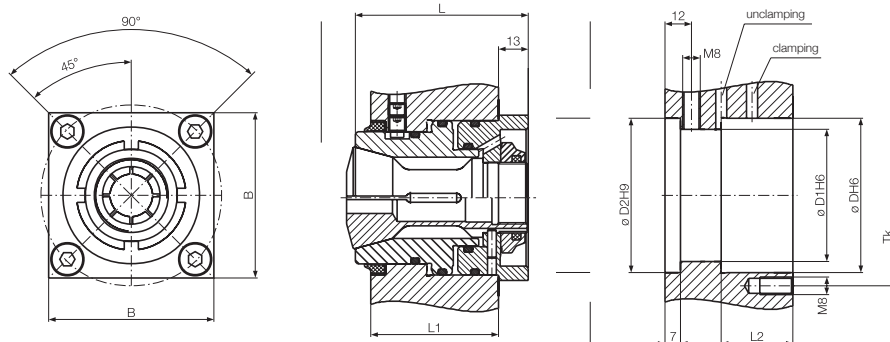
- small dimensions
- high clamping power
- absolutely fixed collets
- for 4/2-path valve

Type HESK clamping units can be mounted in a housing which is specific to the customer.

Thus, the individual clamping units can be arranged according to requirements. The collets are equipped with a plane shoulder on the thread where they are tightened by means of a nut. That way they are absolutely fixed during clamping, no axial movements are possible.



art. no.	D	D1	D2	L	L1	L2	B	Tk	collet type
HESK - 20	70	60	70	78,5	58	38	75	82	3723 E
HESK - 30	80	70	80	86,5	58	38	85	92	3829 E
HESK - 40	90	80	90	86,5	88	46	115	122	3911 E
HESK - 60	110	100	110	107,5	88	46	115	122	3964 E



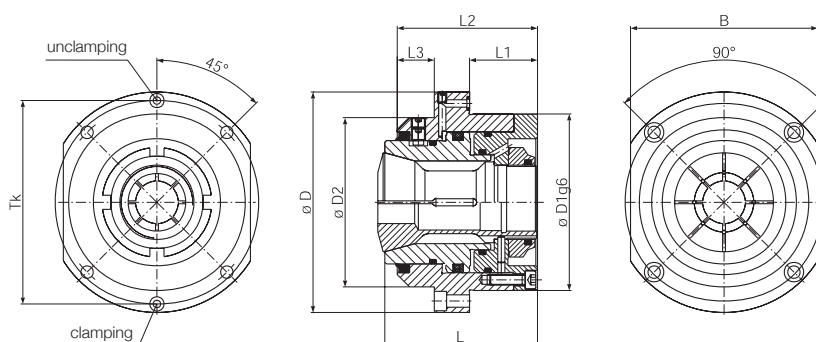
Type HESK-R

These clamping units correspond to the Type HESK units but without a housing. They are

especially used for installation on rotaryindexing tables.



art. no.	D	D1	D2	L	L1	L2	L3	B	Tk	collet type
HESK - R-20	115	90	86	78,5	38,5	71,5	21	96	102	3723 E
HESK - R-30	125	100	96	86,5	38,5	79,5	21	106	112	3829 E
HESK - R-40	135	110	106	86,5	38,5	79,5	21	116	122	3911 E
HESK - R-60	155	130	126	107,5	46,5	100	33,5	136	142	3964 E
HESK - R-100	195	170	135	107,5	46,5	104,2	33,7	176	182	3996 E

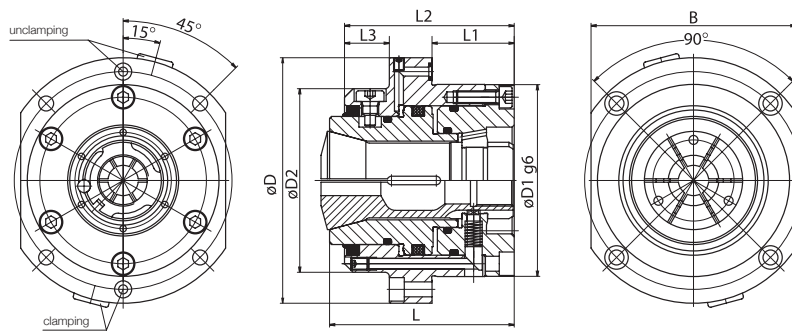


TYPE HESK-RB COLLET CLAMPING ATTACHMENTS

These clamping attachments are similar to type HESK attachments. The only difference is that we use collets with bayonets. In opposition to clamping attachments type HESK-R the

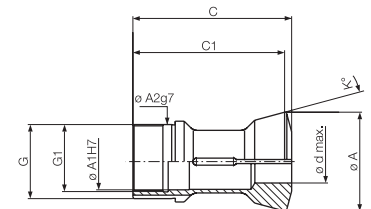
collet on these devices is attached and secured from the front or top. The time required to change from one clamping diameter to the next is reduced to a minimum.

art. no.	D	D1	D2	L	L1	L2	L3	B	Tk	collet type
HESK - RB-20	115	90	86	86,5	38,5	79,5	21	96	102	3768 E
HESK - RB-30	125	100	96	86,5	38,5	79,5	21	106	112	3859 E
HESK - RB-40	135	110	106	86,5	38,5	79,5	21	116	122	3922 E
HESK - RB-60	155	130	126	107,5	46,5	100	33,5	136	142	3970 E
HESK - RB-100	195	170	168	107,5	46,5	104,2	33,7	176	182	3999 E



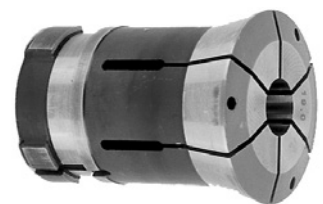
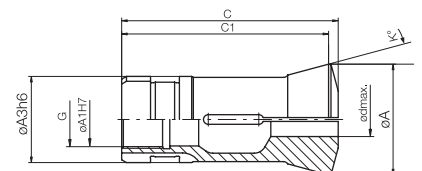
COLLETS FOR TYPE HESK CLAMPING ATTACHMENTS WITH THREAD

art. no.	id.	A	A1	A2	G	G1	K°	C	C1	max. clamping dia.
3723 E	HESK - S-20	46	22	32	M 32 x 1,5	M 24 x 1,5	15	82	78	22
3829 E	HESK - S-30	56	32	42	M 42 x 1,5	M 34 x 1,5	15	90	86	32
3911 E	HESK - S-40	66	42	52	M 52 x 1,5	M 44 x 1,5	15	90	86	42
3964 E	HESK - S-60	86	62	70	M 70 x 1,5	M 65 x 1,5	15	111	107	62
3996 E	HESK - S-100	126	102	110	M 110 x 2	M 104 x 1,5	15	111	107	110



COLLETS FOR TYPE HESK-RB CLAMPING ATTACHMENTS WITH BAYONET

art. no.	id.	A	A1	A2	G	G1	K°	C	C1	max. clamping dia.
3768 E	HESK - SB-20	46	22	35,8	M 24 x 1,5		15	90	86	22
3859 E	HESK - SB-30	56	32	45,8	M 34 x 1,5		15	90	86	32
3922 E	HESK - SB-40	66	42	55,8	M 44 x 1,5		15	90	86	42
3970 E	HESK - SB-60	86	62	75,8	M 64 x 1,5		15	111	107	62
3999 E	HESK - SB-100	126	102	115,8	M 104 x 1,5		15	111	107	110



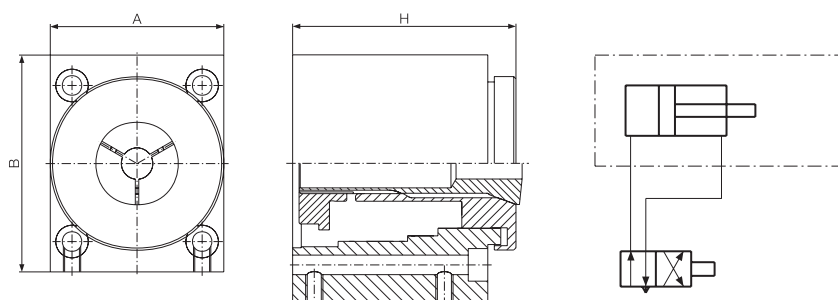
TYPE HZ HYDRAULIC CLAMPING UNITS

- allows close length tolerances to be reached regardless of variations in the diameter of the workpieces being used
- hydraulic or pneumatic
- direct working pressure sleeve
- tandem cylinder, therefore high clamping power with small dimensions
- hardened and ground housing
- pressure medium can be introduced either over the connection thread or through the mounting plate
- pressure up to 80 bar is possible
- for 4/2-path valve



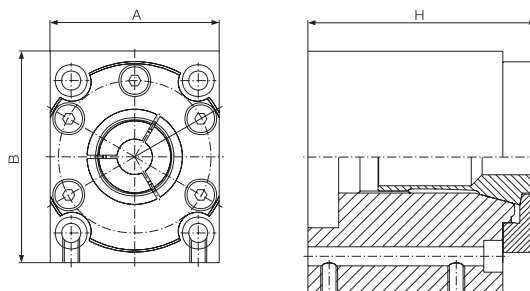
for drawback collets (especially suited for applications using short workpieces)

art. no.	A	B	H	piston surface cm ²	collet typ	through bore	max. clamping dia.	weight kg
HZ 11	80	100	103	40	367 E	22	22	5
HZ 17	100	126	115	54	390 E	38	38	7,5
HZ 22	130	166	145	76	3955 E	60	60	17



for deadlength collets (for steel and rubber collets)

art. no.	A	B	H	piston surface cm ²	collet typ	through bore	max. clamping dia.	weight kg
HZ 25	80	100	107	40	161 E	25	25	5
HZ 40	100	126	114	54	173 E	42	42	8,5
HZ 60	130	166	126,5	76	185 E	60	62	16
HZ 80	160	190	138	96	193 E	80	80	25



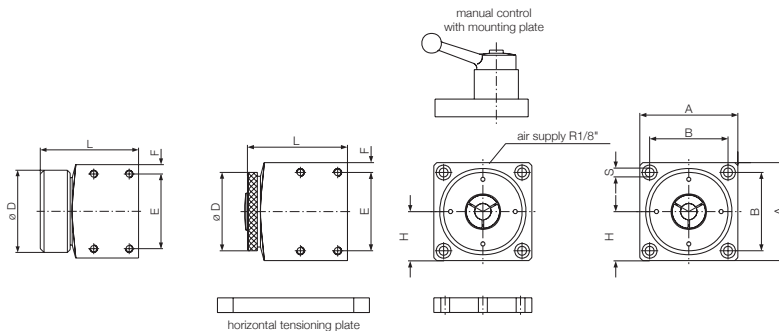
TYPE HPZ PNEUMATIC CLAMPING UNITS WITH POWER TRANSMISSION AND SELF-LOCKING MECHANISM

- drawback collets are especially suited for applications using short workpieces
- allows close length tolerances to be reached regardless of variations in the diameter of the workpieces being used
- mechanical power transmission
- high clamping power
- hardened and ground housing
- suitable for pallets or rotary-indexing tables

The mechanical power transmission is designed in a way, that when clamped, the chucks are self-locking. Automatic locking only works

within a small range. That means only workpieces within a tolerance range of IT 9 can be clamped safely. When the self-locking feature is set, the collet's axial position will change. This is especially important when several units have been mounted at the same height. In this case stops shouldn't be mounted in the collet.

Due to self-locking, only one blast of air is required for tensioning and releasing.



for drawback collets (especially suited for applications using short workpieces)

art. no.	A	L	H	B	D	E	F	S	collet typ	through bore	weight kg
HPZ 11	100	102	50	80	80	80	10	M 8	367 E	22	5
HPZ 17	126	119	63	100	100	100	13	M 10	390 E	38	9

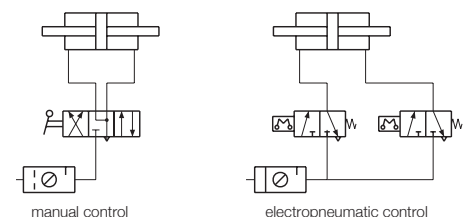
for deadlength collets (for steel and rubber collets)

art. no.	A	L	H	B	D	E	F	S	collet typ	rubber collets	through bore	weight kg
HPZ 15	80	102	40	60	72	60	10	M 6	140 E	Reihe 12	18	3,5
HPZ 20	100	105	50	80	88	80	10	M 8	148 E	Reihe 18	24	5
HPZ 25	100	105	50	80	88	80	10	M 8	161 E	Reihe 20	26	5
HPZ 40	126	124	63	100	112	100	13	M 10	173 E	Reihe 36	42	9,5
HPZ 60	166	134	83	126	128	126	20	M 10	185 E	Reihe 52	60	18

art. no.	axial holding force	torque at ... Ø
HPZ 11	ca. 4900 N	ca. 49 Nm at Ø 22
HPZ 17	ca. 9800 N	ca. 196 Nm at Ø 40
HPZ 25	ca. 7850 N	ca. 78 Nm at Ø 22
HPZ 40	ca. 14700 N	ca. 294 Nm at Ø 40
HPZ 60	ca. 24500 N	ca. 686 Nm at Ø 60

Clamping power:

The clamping power of the type HPZ units is difficult to quote as the clamping effect is dependent on the material, the hardness and the surface of the workpiece. The table therefore gives values for reference purposes only.

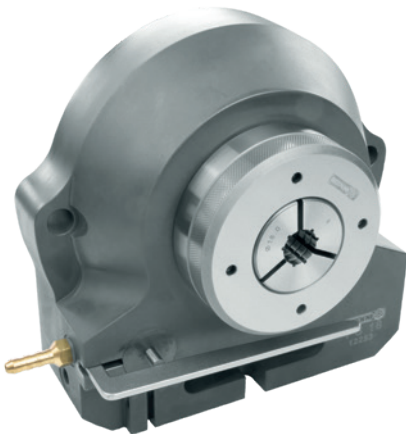
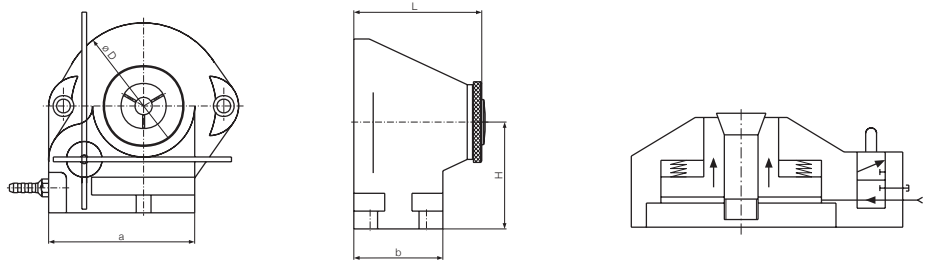


TYPE PS PNEUMATIC CLAMPING UNITS

- drawback collets are especially suited for applications using short workpieces
- allows close length tolerances to be reached regardless of variations in the diameter of the workpieces being used
- can be modified for stepped collets
- integrated 3/2-path control valve remote valves may also be used to open the collet

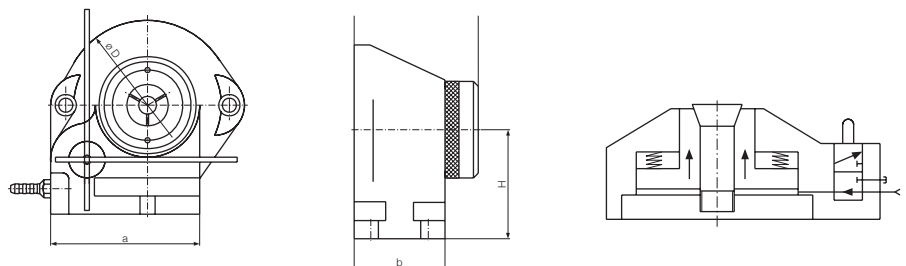
for drawback collets

art. no.	a x b	center height H	D	axial height	max. th. bore	max. clamping-ø	collet type	piston surface cm ²	weight kg
PS 8	85 x 55	70	110	70	8 ø	10 ø x 30	319 E	47	3,5
PS 9	85 x 55	70	110	80	11 ø	14 ø x 35	330 E	47	3,5
PS 10	110 x 75	90	140	100	18 ø	20 ø x 45	359 E	70	8,5
PS 11	110 x 75	90	140	110	22 ø	25 ø	367 E	70	8,5
PS 15	130 x 90	115	190	110	22 ø	25 ø	367 E	168	17
PS 17	130 x 90	115	190	120	38 ø	42 ø	390 E	148	19



for deadlength collets

art. no.	a x b	center height H	D	axial height	max. th. bore	max. clamping-ø	collet type	piston surface cm ²	weight kg
PS 4	85 x 55	70	110	80	12 ø	12 ø	136 E	44	3,5
PS 5	85 x 55	70	110	80	15 ø	15 ø	140 E	44	3,5
PS 13	110 x 75	90	140	105	22 ø	24 ø	148 E	65	8,5
PS 14	110 x 75	90	140	105	26 ø	26 ø	161 E	65	8,5
PS 18	130 x 90	115	190	125	42 ø	42 ø	173 E	148	15
PS 19	130 x 90	115	190	125	60 ø	60 ø	185 E	126	16

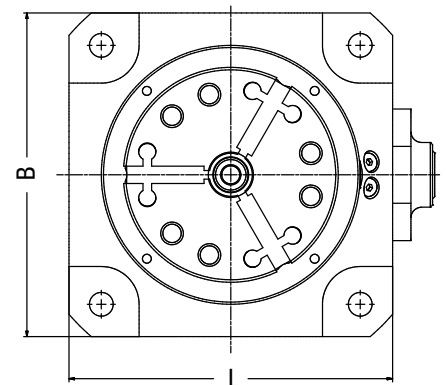
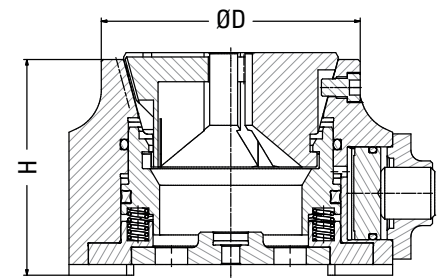


TYPE MSKZ MANUAL CLAMPING UNITS

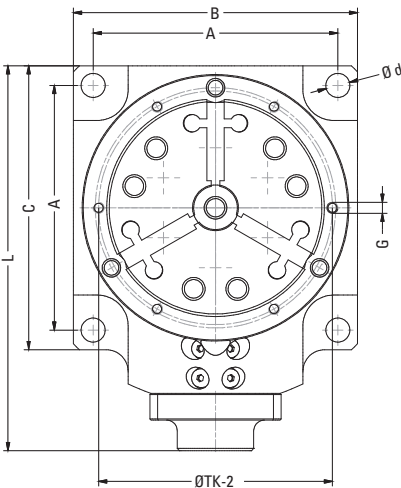
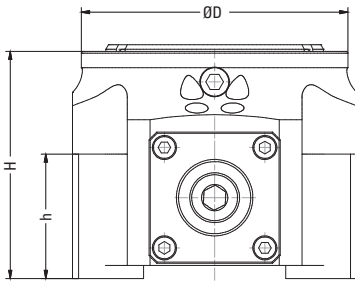
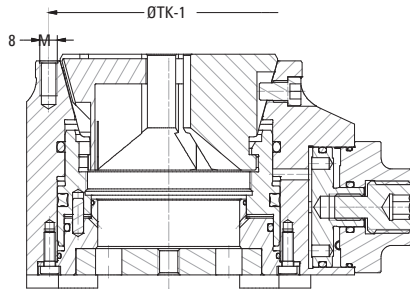
- for clamping heads
- easy set-up
- convenient mounting
- horizontal or vertical mounting
- ideal for 5-axis machining
- highest clamping force and rigidity
- pull-down effect
- quick change of clamping heads
- for stationary workpiece stops
- also for use without workpiece top (bore corresponds to the maximum clamping bore of the clamping head)

for clamping heads

art. no.	D	B	L	H	collets
MSKZ 32	80	110	110	100	771 E, 772 E
MSKZ 42	100	130	130	100	781 E, 782 E
MSKZ 52	100	130	130	100	783 E
MSKZ 65	120	150	150	100	787 E, 788 E
MSKZ 80	135	165	165	110	791 E
MSKZ 100	165	200	200	110	797 E



TYPE MZ MANUAL CLAMPING UNITS



In addition to the advantages of Nann's established clamping units, the manual clamping unit type MZ offers further possibilities. Clamping via clamping heads, deadlength collets, draw-back collets or clamping sleeves is made easy within a short time by replacing

a few components. All this is now made possible through an optimised power transmission in both axial directions and a double-acting piston. The flexible design and comfortable, efficient mounting are further advantages.

manual clamping units type MZ

art. no.	A	B	C	L	h	H	d	D	ØTK-1	ØTK-2	G
MZ 32	80	110	105	145	65	100	100	84	70	66	M5
MZ 42	100	130	117,5	162	65	100	100	106	92	86	M5
MZ 52	100	130	117,5	162	65	100	100	106	92	86	M5
MZ 65	112	150	130	176	57	104	104	122	110	107	M5
MZ 80	112	165	142,5	189,7	59	104	104	136		125	M6

conversion kits type S, deadlength collets series 100 and draw-back collets series 300

art. no.	H	ØD
MZ32 - 140 E	141	70
MZ32 - 148 E	141	70
MZ32 - 349 E	122	80
MZ42 - 163 E	142	80
MZ42 - 364 E	122	70
MZ52 - 148 E	140	80
MZ52 - 161 E	142	80
MZ52 - 163 E	142	80
MZ52 - 359 E	122	70
MZ52 - 364 E	122	70

art. no.	H	ØD
MZ65 - 163 E	146	80
MZ65 - 173 E	150	104
MZ65 - 367 E	126	70
MZ65 - 385 E	126	70
MZ65 - 386 E	136	70
MZ65 - 3713 E	126	70

SLEEVE MANDRELS FOR DOUBLE TAPER SLEEVES

Internal clamping sleeves with double taper are suited to internal clamping of pre-machined parts. Because these have tapers and slots at both ends, the clamping sleeve is able

to open in various different ways and securely hold workpieces in the bore which have cylindrical faults.

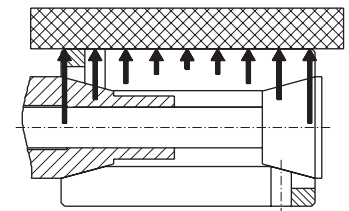
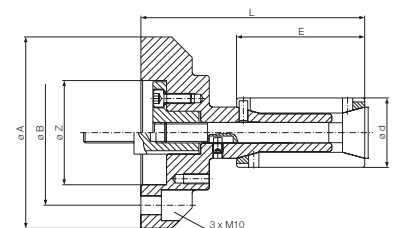
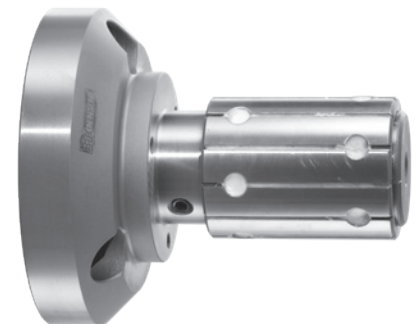
type KFD short design

art. no.	clamping range	A	L	Z	B	E	max. tensile force daN
KFD 0 K	15 - 20	102	88	51,5	75	24	400
KFD 1 K	20 - 26	102	104	51,5	75	32	700
KFD 2 K	26 - 34	102	116	51,5	75	40	1100
KFD 3 K	34 - 45	112	131	61	85	50	1600
KFD 4 K	45 - 60	112	151	61	85	65	3000
KFD 5 K	60 - 80	112	186	61	85	90	3000
KFD 6 K	80 - 105	135	232	80	104,8	120	3000
KFD 7 K	105 - 140	135	212	80	104,8	150	3000

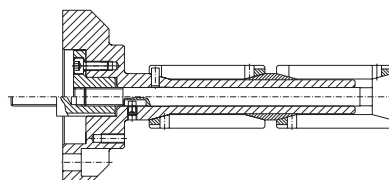
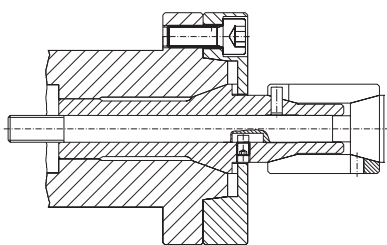
type KFD long design

art. no.	clamping range	A	L	Z	B	E	max. tensile force daN
KFD 0 L	15 - 20	102	88	51,5	75	32	400
KFD 1 L	20 - 26	102	104	51,5	75	48	700
KFD 2 L	26 - 34	102	116	51,5	75	60	1100
KFD 3 L	34 - 45	112	131	61	85	75	1600
KFD 4 L	45 - 60	112	151	61	85	95	3000
KFD 5 L	60 - 80	112	186	61	85	130	3000
KFD 6 L	80 - 105	135	232	80	104,8	170	3000
KFD 7 L	105 - 140	135	282	80	104,8	220	3000

Adaptor both for manually operated or power driven are not included.



special design



INTERNAL CLAMPING SLEEVES WITH DOUBLE TAPER

Use:

for internal clamping

Advantages:

- double clamping effect
- return effect
- clamps slightly tapered bores

Running concentricity (truth):

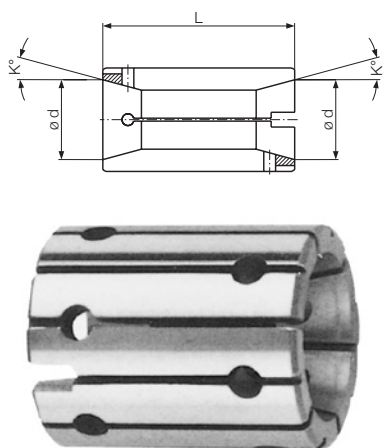
0,01

Hardness:

The internal clamping sleeves are made from special spring steel. They are hardened – depending on the design – to approx. HRc 48 up to HRc 56.

Taper of sleeve mandrel:

The taper of the sleeve mandrel should be 15' (one-sided) steeper than the taper angles given in the tables. This frees the clamping sleeves on release.



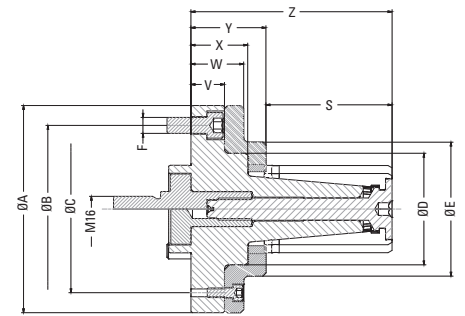
type DK

Art. no.	d	L	K°	expansion	clamping diameter
DK 0 K	12	24	15	0,5	15 to 20 increment of 0,5
DK 0 L	12	32	15	0,5	15 to 20 increment of 0,5
DK 1 K	17	32	15	0,5	20 to 26 increment of 0,5
DK 1 L	17	48	15	0,5	20 to 26 increment of 0,5
DK 2 K	22	40	15	1	26 to 34 increment of 1
DK 2 L	22	60	15	1	26 to 34 increment of 1
DK 3 K	30	50	15	1	34 to 45 increment of 1
DK 3 L	30	75	15	1	34 to 45 increment of 1
DK 4 K	40	65	15	1,5	45 to 60 increment of 1
DK 4 L	40	95	15	1,5	45 to 60 increment of 1
DK 5 K	54	90	15	1,5	60 to 80 increment of 1
DK 5 L	54	130	15	1,5	60 to 80 increment of 1
DK 6 K	72	120	15	2	80 to 105 increment of 1
DK 6 L	72	170	15	2	80 to 105 increment of 2
DK 7 K	95	150	15	2	105 to 140 increment of 2
DK 7 L	95	220	15	2	105 to 140 increment of 2

SLEEVE MANDRELS FOR TYPE S CLAMPING SLEEVES

manually operated or power driven

art. no.	clamping range	A	B	C	D	E	F	S	V	W	X	Y	Z
MFS/KFS 00	15 - 20	100	75	75	40	54	M10	31,5	21	33	36	47,5	79
MFS/KFS 01	20 - 25	100	75	75	40	54	M10	36	21	33	36	47,5	83,5
MFS/KFS 02	25 - 30	100	75	75	46	60	M10	45	21	33	37	48	93
MFS/KFS 03	30 - 35	100	75	75	46	60	M10	49	21	33	41	51,5	100,5
MFS/KFS 04	35 - 40	100	75	75	46	60	M10	59	21	33	36,5	46	105
MFS/KFS 05	40 - 45	130	105	105	70	84	M10	59	21	33	37,5	49,5	108,5
MFS/KFS 06	45 - 55	130	105	105	70	84	M10	79	21	33	35,5	47	126
KFS 07	55 - 65	130	105	105	70	84	M10	89	21	33	35,5	47	136
KFS 08	65 - 82	160	130	130	83	103	M12	99	23	35	35	47	146
KFS 09	82 - 101	160	130	130	91	160	M12	121	21	21	–	33	154
KFS 10	101 - 120	160	130	130	87	160	M12	138,9	21	21	–	37	176
KFS 11	120 - 140	160	130	149	107	160	M12	171	25	25	–	57	228



The clamping sleeve and clamping screw are not included in the delivery and have to be requested separately.

INTERNAL CLAMPING SLEEVES WITH SINGLE TAPER TYPE S COLLETS

Use:

- for internal clamping when
 - grinding
 - turning
 - concentricity control
- manually operated
- power driven

Mounting of sleeve mandrels:

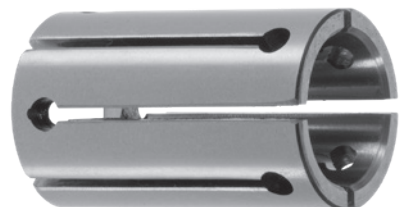
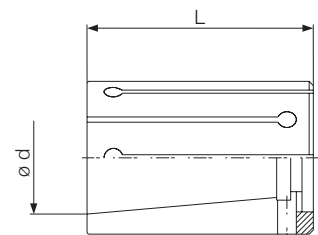
- between turning centres
- at the cylindrical shank
- via Morse taper
- via cylindrical adapting and plan surface

running concentricity (truth):

0,01

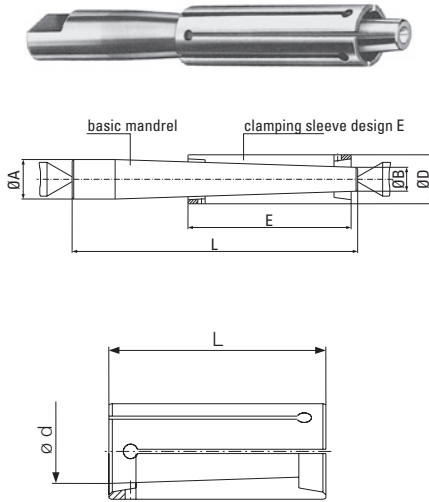
type S

art. no.	d	L	expansion	clamping diameter
S 00	12,99	35	1	14,7 to 19,7 increment of 0,5
S 01	17,94	40	1	19,7 bis 24,7 increment of 0,5
S 02	21,92	46	1	24,7 bis 29,7 increment of 0,5
S 03	25,83	50	1	29,7 bis 34,7 increment of 0,5
S 04	30,52	60	1	34,7 bis 39,7 increment of 0,5
S 05	35,08	60	1	39,7 bis 44,7 increment of 0,5
S 06	39,77	80	2	44,7 bis 54,7 increment of 1
S 07	48,97	90	2	54,7 bis 64,7 increment of 1
S 08	58,02	100	2	64,7 bis 81,7 increment of 1
S 09	71,11	122	2	81,7 bis 100,7 increment of 1
S 10	85,95	140	2	100,7 bis 110,7 increment of 1
S 10	85,95	140	2	112,7 bis 118,7 increment of 2
S 11	105,64	180	2	119,7 bis 127,7 increment of 1
S 11	105,64	180	2	129,7 bis 139,7 increment of 2



SLEEVE MANDRELS FOR TYPE E CLAMPING SLEEVES

for manual clamping and holding between tips



art. no.	clamping range	E	L	A	B
MZE 00	8 - 10,5	40	75	8	4,1
MZE 01	10 - 12,5	45	110	10	5,3
MZE 02	12 - 15	60	125	12	5,7
MZE 03	14 - 17	70	140	14	6,9
MZE 04	16 - 19	70	150	16	8,5
MZE 05	19 - 23	80	170	19	10,7
MZE 06	22 - 26	80	175	21	12,2
MZE 07	25 - 37	100	225	25	14,6
MZE 08	35 - 47	100	225	33	22,6
MZE 09	45 - 59	125	300	45	31,1
MZE 10	55 - 70	135	330	53	38
MZE 11	68 - 85	150	350	64	48,2
MZE 12	80 - 105	150	350	76	60,9
MZE 13	105 - 140	170	400	99	80,4
MZE 14	135 - 185	180	420	124	97,4
MZE 15	185 - 235	200	443	146	122,4

INTERNAL CLAMPING SLEEVES WITH SINGLE TAPER TYPE E

Use:

- for internal clamping when
 - grinding
 - turning
 - concentricity control
- manually operated, self-locking

Hardness:

The internal clamping sleeves are made from special spring steel. They are hardened – depending on the design – to approx. HRc 48 up to HRc 56.

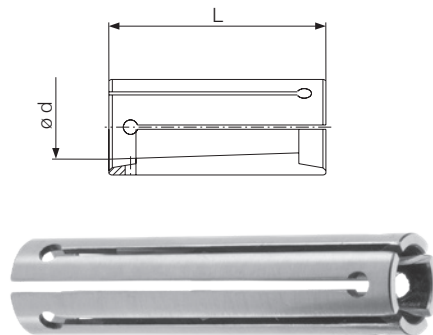
Mounting of sleeve mandrels:

- between tips

Running concentricity (truth):

0,01

Typ E

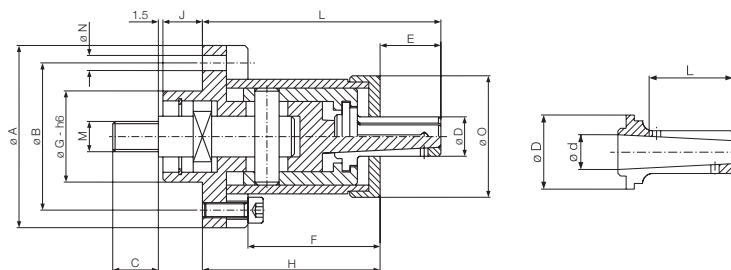


art. no.	d	L	expansion	clamping diameter
E 00	7,055	40	1,5	8 - 9
E 01	8,6	45	1,5	10 - 11
E 02	10,15	60	2	12 - 13
E 03	12,11	70	2	14 - 15
E 04	13,57	70	2	16 - 17 - 18
E 05	16,09	80	2	19 - 20 - 21
E 06	17,73	80	2	22 - 23 - 24
E 07	21,33	100	3	25 - 26 - 28 - 30 - 32 - 34
E 08	29,55	100	3	35 - 36 - 38 - 40 - 42 - 44
E 09	39,19	125	5	45 - 48 - 50 - 52 - 54
E 10	47,15	135	5	55 - 58 - 60 - 62 - 65
E 11	58,43	150	5	68 - 70 - 72 - 75 - 78 - 80
E 12	70,95	150	5	80 - 85 - 90 - 95 - 100
E 13	91,76	170	5	105 - 110 - 115 - 120 - 125 - 130 - 135
E 14	115,11	180	5	135 - 140 - 145 - 150 - 155 - 160 - 165 - 170 - 175 - 180
E 15	140,1	200	5	185 - 190 - 195 - 200 - 205 - 210 - 215 - 220 - 225 - 230

SLEEVE MANDRELS FOR TYPE B CLAMPING SLEEVES

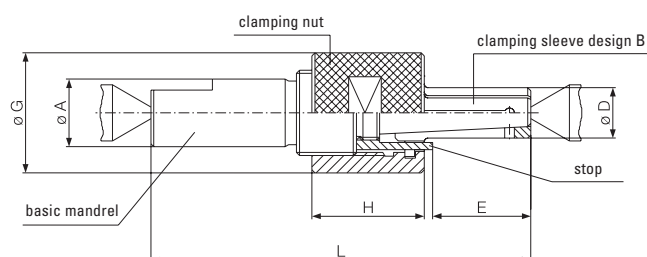
power driven

art. no.	clamping range	A	B	G - h6	N	O	C	E	F	H	J	L	M
KFB 00	5,5 - 7	45	36	25	5,5	24	14	9	30	42,5	11,5	51,5	M 8
KFB 01	7,5 - 9	50	39	25	6,6	31	14	12,5	33	46	12	58,5	M 8
KFB 02	9,5 - 11,5	56	46	30	6,6	38	15	16	39	54	13	70	M 10
KFB 03	12 - 14,5	60	50	30	6,6	40	15	22	43	58,5	13	78,5	M 10
KFB 04	14,5 - 19	72	60	30	6,6	52	15	24	50	66	14	90	M 10
KFB 05	19,5 - 24,5	76	64	40	6,6	54	18	30	51	67	14	97	M 12
KFB 06	24,7 - 28,7	82	70	40	6,6	60	18	36	55	71	14	107	M 12



for manual clamping and mounting between tips

art. no.	sleeve mandrel type 241-00 (without nut)						nut type 241-60			stop type 241-70		
	clamping range	L	A	E	centering B	weight	G	H	M	C	F	M
MZB 00	5,5 - 7	71	10	12	2	0,40	19,5	22	14 x 1,5	10,8	8,5	7 x 1
MZB 01	7,5 - 9	79,5	12	16	2	0,60	23	26	16 x 1,5	13,8	10,5	9 x 1
MZB 02	9,5 - 11,5	89,5	12	20	2	0,92	28	27	20 x 1,5	16,8	13,2	11 x 1
MZB 03	12 - 14,5	97,5	14	26	2	1,92	31	29	24 x 1,5	20,8	16	14 x 1
MZB 04	14,5 - 19	102,5	18	30	2	3,1	38	30	30 x 1,5	26,8	21	18 x 1
MZB 05	19,5 - 24,5	113,5	20	36	2	3,6	47	30	36 x 1,5	31,8	26	24 x 1,5
MZB 06	24,7 - 28,7	136	25	42,5	2	6,7	54	40	42 x 1,5	36,8	31	30 x 1,5
MZB 07	29,7 - 33,7	144,5	30	46	2,5	9,5	57,5	40	45 x 1,5	41,8	36	34 x 1,5
MZB 08	34,7 - 38,7	156	40	52,5	2,5	15,5	66	40	52 x 1,5	47,8	41	36 x 1,5
MZB 09	39,7 - 43,7	168,5	40	58	3,15	19	74	40	56 x 1,5	52,8	46	40 x 1,5
MZB 10	44,7 - 53,7	197	45	76,5	3,15	28	83	45	65 x 2	61,8	55,5	52 x 2
MZB 11	54,7 - 63,7	208,5	50	85	4	40	93	48	75 x 2	71,8	65,5	62 x 2
MZB 12	64,7 - 78,7	221,5	50	96	5	63	108	50	95 x 2	90,8	83	75 x 2



INTERNAL CLAMPING SLEEVES WITH SINGLE TAPER TYPE B

Use:

- for internal clamping when
 - grinding
 - turning
 - concentricity control
- manually operated via clamping nut

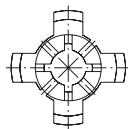
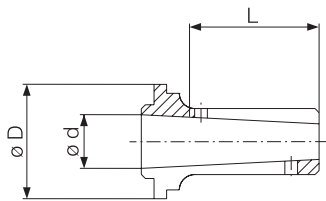
Mounting of sleeve mandrels:

- between turning centres
- at the cylindrical shank
- via Morse taper

running concentricity (truth):

0,01

type B

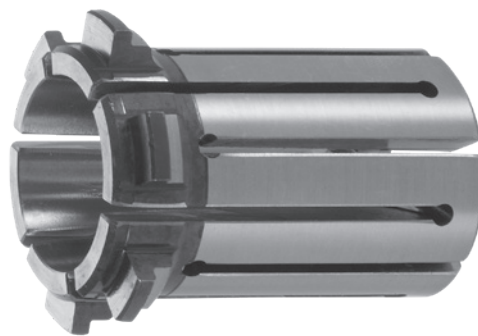


4-fold bayonet



8-fold bayonet

art. no.	d	D	L	expansion	bayonet	clamping diameter
B 00	4,64	12	11	0,5	3 - fach	5,5 to 7 increment of 0,5
B 01	6,02	15,5	14	0,5	4 - fach	7,5 to 9 increment of 0,5
B 02	7,78	18,5	17,5	0,5	4 - fach	9,5 to 11,5 increment of 0,5
B 03	10,56	22,5	22,5	0,5	4 - fach	12 to 14,5 increment of 0,5
B 04	12,98	28,5	26,5	0,5	4 - fach	14,5 to 19 increment of 0,5
B 05	16,97	33,5	33	0,5	4 - fach	19,5 to 24,5 increment of 0,5
B 06	22,42	39	39,5	1	6 - fach	24,7 to 28,7 increment of 1
B 07	26,33	44	41,7	1	6 - fach	29,7 to 33,7 increment of 1
B 08	31,02	50	47,6	1	6 - fach	34,7 to 38,7 increment of 1
B 09	35,6	55	53,7	1	6 - fach	39,7 to 43,7 increment of 1
B 10	20,29	65	63	1	8 - fach	44,7 to 53,7 increment of 1
B 11	59,5	75	68,5	1	8 - fach	54,7 to 63,7 increment of 1
B 12	60,36	94	91,7	1	10 - fach	64,7 to 87,7 increment of 1



DIN ISO 10897 COLLETS FOR TOOL CLAMPING

Double-taper collets according to DIN ISO 10897

- for tools with cylindrical shank
- for tools with thread for draw-in bolt

Clamping tolerance:

Type A collets:

for tool shanks with tolerance h 10

Type B collets:

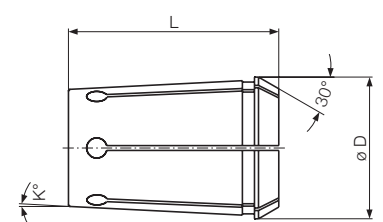
Clamping tolerance -0.5 mm

Hardness:

Type A collets (slotted on one end) have a head hardness of approx. HRc 60 and are partially tempered in the area at the end of the slots. Type B collets are tempered to approx. HRc 46 due to the clamping tolerance.

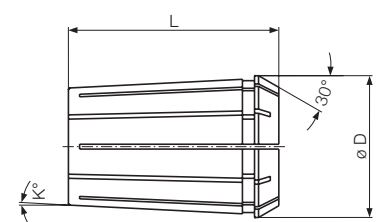
type A: single-slotted, h 10 clamping tolerance

art. no.	D	L	taper	clamping range
400 E	11,5	21	1 : 10	1 - 6
401 E	14,5	26	1 : 10	1 - 8
404 E	17,2	30	1 : 10	1 - 10
407 E	19,9	34	1 : 10	1 - 12
410 E	25,5	40	1 : 10	2 - 16
444 E	35,05	52	1 : 10	2 - 25
450 E	44	60	1 : 10	4 - 32
453 E	52,5	68	1 : 10	6 - 11
486 E	64,2	80	1 : 10	8 - 29



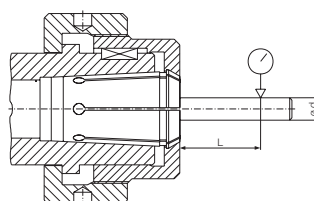
type B: double-slotted, -0.5 clamping tolerance

art. no.	D	L	taper	clamping range
415 E	25,5	40	1 : 10	2 - 16
4541 E	30	45	1 : 10	2 - 20
462 E	35,05	52	1 : 10	2 - 25
467 E	44	60	1 : 10	6 - 32
468 E	52,5	68	1 : 10	12 - 40
486 E	64,2	80	1 : 10	30 - 50



running concentricity - Collets DIN ISO 10897

clamping diameter		testing point L	running concentricity	
d from	d to		standard	high precision
1	1,6	2 - 3	0,015	0,01
1,6	3	10	0,015	0,01
3	6	16	0,015	0,01
6	10	25	0,015	0,01
10	18	40	0,02	0,01
18	24	50	0,02	0,01
24	30	60	0,02	0,01
30	40	60	0,03	0,015



similar to DIN ISO 10897

DIN ISO 15488 COLLETS FOR TOOL CLAMPING

Double-taper collets according to DIN ISO 15488

- for tools with cylindrical shank
- for tools with internal cooling
- for tools with square drive

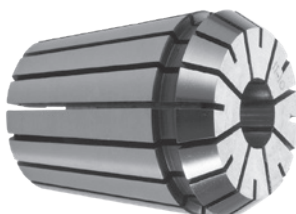
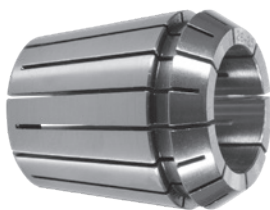
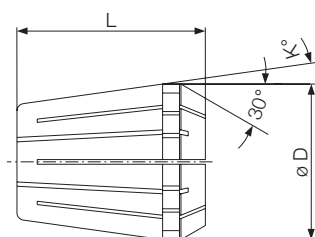
Hardness:

Collets are tempered to approx. HRc 46 due to the clamping tolerance.

Clamping tolerance:

for bores up to 4 mm: -0.5 mm

for bores greater than 4 mm: -1.0 mm

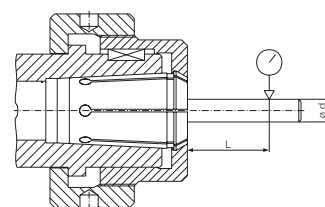


double-slotted

art. no.	D	L	K°	clamping range
4004 E	8,5	13,5	8	1 - 5
4008 E	11,5	18	8	1 - 7
424 E	12	19,5	8	1 - 7
426 E	17	28	8	1 - 10
428 E	21	32	8	1 - 13
430 E	26	34	8	1 - 16
470 E	33	40	8	2 - 20
472 E	41	46	8	3 - 26
477 E	52	60	8	6 - 34

running concentricity

clamping diameter		testing point	running concentricity	
d from	d to	L	standard	high precision
1	1,6	2 - 3	0,015	0,01
1,6	3	10	0,015	0,006
3	6	16	0,015	0,006
6	10	25	0,015	0,006
10	18	40	0,02	0,006
18	24	50	0,02	0,006



similar to DIN ISO 15488

Corresponding clamping chucks and clamping nuts on request

COLLETS FOR MULTI-SPINDLE DRILL HEADS AND HAND GRINDERS

Three Patterns:

- standard pattern
- with internal thread for stop screw
- with square drive for tap drill

Collets for hand grinders:

These collets can be delivered only with the bore holes indicated. For other diameters an additional charge is required.

for multi-spindle drill heads

art. no.	pic.	d	D	L	K°	thread G	max. diameter
6023 E	1	5	6,5	20	20	M 5 x 0,6	2,9
600 E	1	6	9	28,5	10	M 6 x 0,75	4
6043 E	1	6	8,5	25,5	20	M 6 x 0,7	4
601 E	1	8	11	33	10	M 8 x 0,75	6
603 E	1	8	11,5	30,5	20	M 8 x 0,85	6
6314 E	1	10	14	34	15	M 10 x 0,75	8
635 E	1	12	18	34	15	M 12 x 0,75	9

for multi-spindle drill heads with driving square for taps

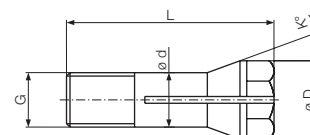
art. no.	pic.	d	D	L	K°	thread G	max. diameter
6023 E - G	2	5	6,5	20	20	M 5 x 0,6	2,9
601 E - G	2	8	11	33	10	M 8 x 0,75	6
603 E - G	2	8	11,5	30,5	20	M 8 x 0,85	6
6314 E - G	2	10	14	34	15	M 10 x 0,75	8
635 E - G	2	12	18	34	15	M 12 x 0,75	9

for multi-spindle drill heads for stops

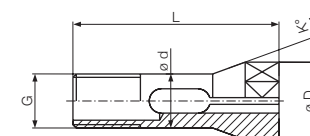
art. no.	pic.	d	D	L	K°	thread G	max. diameter
6023 E - A	3	5	6,5	20	20	M 5 x 0,6	2,9
601 E - A	3	8	11	33	10	M 8 x 0,75	6
603 E - A	3	8	11,5	30,5	20	M 8 x 0,85	6
6314 E - A	3	10	14	34	15	M 10 x 0,75	8
635 E - A	3	12	18	34	15	M 12 x 0,75	9

for hand grinders

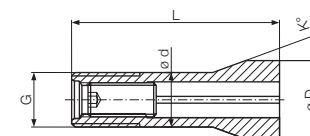
art. no.	pic.	d	D	L	K°	thread G	max. diameter
6071 E	4	8,08	10	30	21	M 8 x 0,75	6
634 E	5	12	15	39,5	10	M 6	6 - 1/4" - 8
6369 E	5	15	18	49	10	M 8	6 - 8 - 10



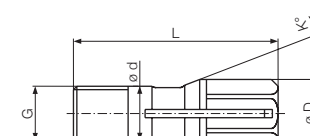
Pic. 1



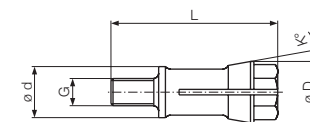
Pic. 2



Pic. 3



Pic. 4



Pic. 5



tailormade clamping technology

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