

KBF-N



APPLICATION

For clamping tasks for internal and external clamping where the axial run-out errors of the workpiece have to be minimized.

TYPE

Power chuck with draw-down and ball lock principle available with cylindrical center mount or short taper mount.

CUSTOMER BENEFITS

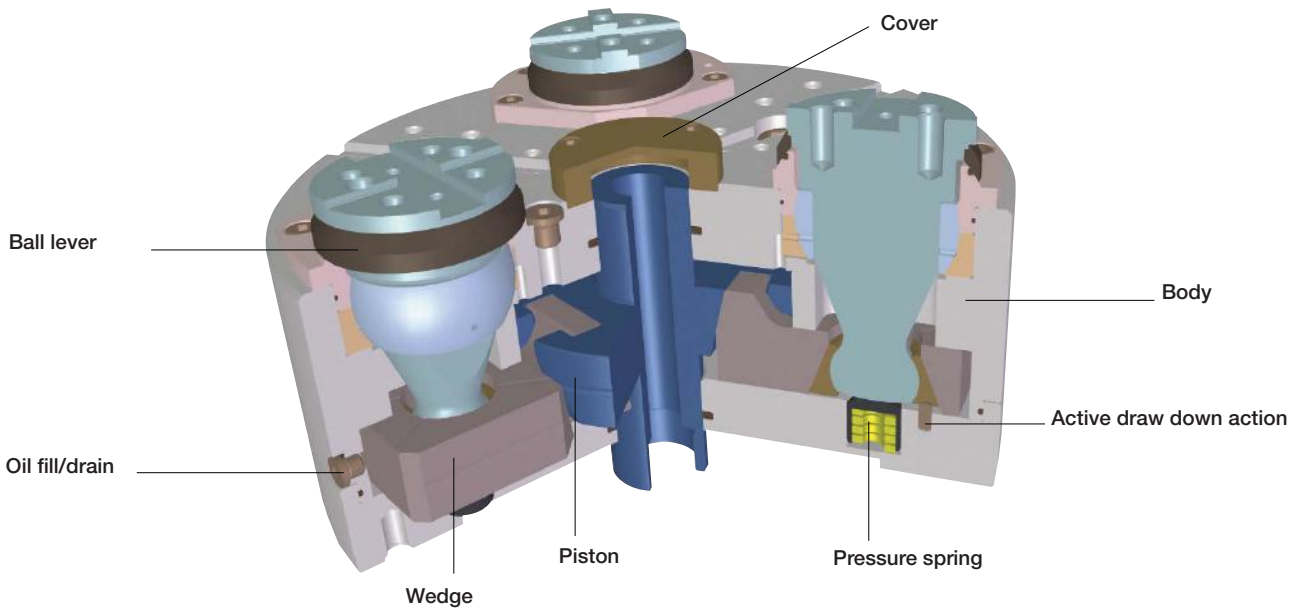
- ④ Maximum plane-parallelism thanks to active draw-down by the jaws
- ④ Maximum productivity thanks to long maintenance intervals - hermetically sealed against dirt and cooling water
- ④ Consistent workpiece quality thanks to constant clamping force due to oil filling
- ④ Suitable for high speeds (speed-dependent centrifugal influences are minimized by similar mass distribution to the right and left of the ball lock)

TECHNICAL FEATURES

- Ball lock principle with wedge hook system
- With fixed jaws (pendulum jaws on request)

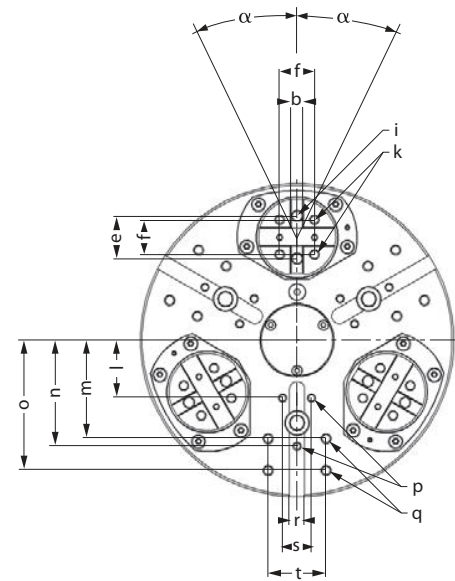
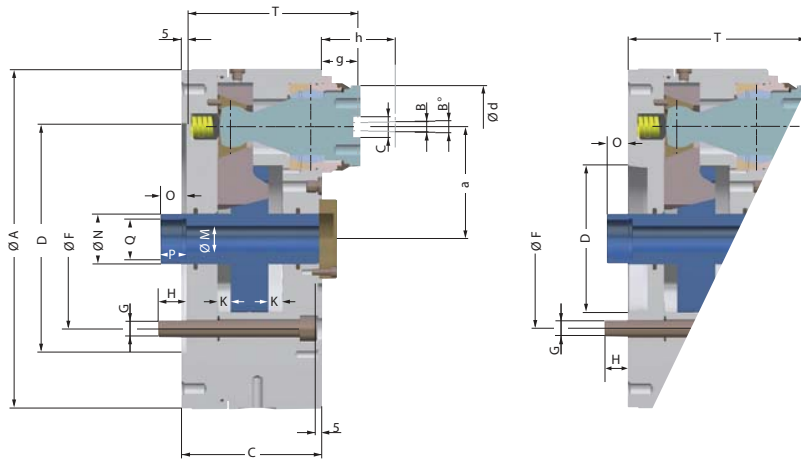
Note:

Alternatively with swinging ball lock for clamping rough, easily deformable workpieces at six clamping points on request



Power-operated ball lock draw-down chuck

KBF-N



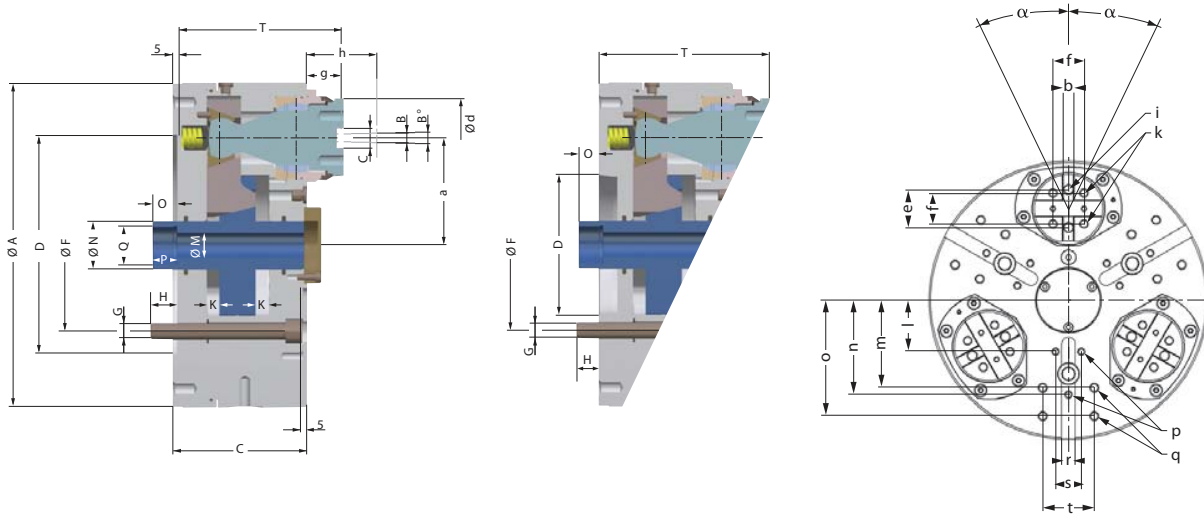
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Power-operated ball lock draw-down chuck KBF-N with fixed jaws for internal and external clamping, with pull down effect, hermetically sealed, oil filled, central clamping
 Cylindrical centre mount DIN 6353

Item no.	168355 ▲	165635	165637 ▲	165639 ▲	168056 ▲
Size	170	200	250	315	400
Jaw design	Fixed jaws	Fixed jaws	Fixed jaws	Fixed jaws	Fixed jaws
A mm	178	210	260	325	400
Jaw travel B mm	5,4	5,9	6,3	6,4	7,5
B°	5,2°	4,9°	4,4°	4,5°	4,7°
C mm	94	111	135	135	148
D	ZA 140	ZA 170	ZA 220	ZA 220	ZA 300
F mm	104,8	133,4	171,4	171,4	235
G	3 x M10	3xM12	3xM16	3xM16	3 x M20
H mm	15	17	22	22	30
Total wedge stroke K+K mm	21	25	25	25	30
M mm	14	14	18	25	52
Ng6 mm	30	36	38	48	75
O min.	12,5	12,5	12,5	12,5	10
O max.	33,5	37,5	37,5	37,5	40
P mm	20	18	20	25	25
Q mm	M22 x 1,5	M28x1,5	M32x1,5	M38x1,5	M60 x 1,5
T mm	116	139	163	163	180
a mm	55	64	82	107	130
bh8 mm	7,94	7,94	12,7	12,7	12,7
ch7 mm	12,68	12,68	19,03	19,03	19,03
d mm	60	65	75	80	105
e mm	32	38	44,4	44,4	63,5
f mm	24	32	36	36	48
g mm	27	33	33	33	37
Reference height h mm	50	60	70	70	80
i	M10	M12	M12	M12	M16
k	M8	M10	M10	M10	M12
l mm	-	30	50	60	80
m mm	65	80	102	102	140
n mm	68	50	65	110	144
o mm	-	-	-	135	170
p	M6	M6	M8	M8	M10
q	M8	M8	M10	M10	M12
r mm	16	16	16	16	20
s mm	-	25	30	30	36
t mm	36	45	60	60	80
Floating angle α	5°	5°	3°	3°	3°
Pull-down travel mm	0,3	0,3	0,3	0,3	0,3
Max. admissible speed min-1	5000	4500	3800	3000	2200
Maximum draw bar pull kN	18	30	40	45	50
Max. total clamping force kN	44	73	93	105	120
Weight approx. kg	18	30	55	80	130
Actuating cylinders (recommended)	OVS-85	OVS-105	OVS-130	OVS-130	OVS-150

Power-operated ball lock draw-down chuck

KBF-N



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 Power-operated ball lock draw-down chuck KBF-N with fixed jaws for internal and external clamping, hermetically sealed, oil filled, central clamping
 Short taper mount for ISO 702-1 (DIN 55026/55021)

Item no.	168356 ▲	165636	165638 ▲	165640 ▲	168057 ▲
Size	170	200	250	315	400
Jaw design	Fixed jaws	Fixed jaws	Fixed jaws	Fixed jaws	Fixed jaws
A mm	178	210	260	325	400
Jaw travel B mm	5,4	5,9	6,3	6,4	7,5
B°	5,2°	4,9°	4,4°	4,5°	4,7°
C mm	94	111	135	135	148
D	KK 5	KK 6	KK 8	KK 8	KK 11
F mm	104,8	133,4	171,4	171,4	235
G	3 x M10	3xM12	3xM16	3xM16	3 x M20
H mm	15	17	22	22	30
Total wedge stroke K+K mm	21	25	25	25	30
M mm	14	14	18	25	52
Ng6 mm	30	36	38	48	75
O min.	7,5	7,5	7,5	7,5	5
O max.	28,5	32,5	32,5	32,5	35
P mm	20	18	20	25	25
Q mm	M22 x 1,5	M28x1,5	M32x1,5	M38x1,5	M60 x 1,5
T mm	121	144	168	168	185
a mm	55	64	82	107	130
bh8 mm	7,94	7,94	12,7	12,7	12,7
ch7 mm	12,68	12,68	19,03	19,03	19,03
d mm	60	65	75	80	105
e mm	32	38	44,4	44,4	63,5
f mm	24	32	36	36	48
g mm	27	33	33	33	37
Reference height h mm	50	60	70	70	80
i	M10	M12	M12	M12	M16
k	M8	M10	M10	M10	M12
l mm	-	30	50	60	80
m mm	65	80	102	102	140
n mm	68	50	65	110	144
o mm	-	-	-	135	170
p	M6	M6	M8	M8	M10
q	M8	M8	M10	M10	M12
r mm	16	16	16	16	20
s mm	-	25	30	30	36
t mm	36	45	60	60	80
Floating angle α	5°	5°	3°	3°	3°
Pull-down travel mm	0,3	0,3	0,3	0,3	0,3
Max. admissible speed min-1	5000	4500	3800	3000	2200
Maximum draw bar pull kN	18	30	40	45	50
Max. total clamping force kN	44	73	93	105	120
Weight approx. kg	18	30	55	80	130
Actuating cylinders (recommended)	OVS-85	OVS-105	OVS-130	OVS-130	OVS-150

Jaws KBF-N

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Soft top jaws, 3-jaw set tongue and groove, material: 16 MnCr 5



Item no.	Chuck Size	Jaw length mm	Jaw height mm	Jaw width mm
168383 ▲	170	70	26,5	60
165694 ▲	200	80	31,5	65
165696 ▲	250/315	90	41,5	75
168385 ▲	400	125	46,5	105

Workpiece-specific top jaws can be placed on the tongue and groove interface of the ball bolts.

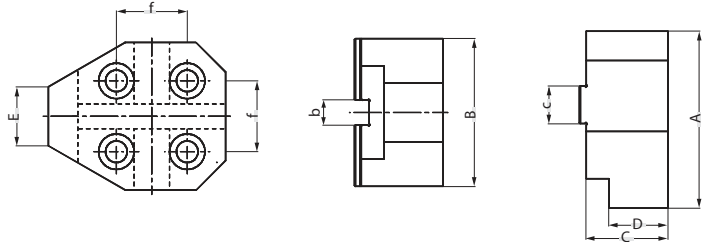
For exact clamping, soft top jaws are preferably used. They are to be turned out to the desired clamping diameter under clamping force. If these top jaws are still to be hardened, the chuck must be ground out afterward.

For raw-part clamping, hardened clamping inserts can be worked into the soft top jaws at the corresponding clamping diameter.

On request, special top jaws specific to the workpiece can also be delivered.

Soft top jaws for KBF-N

Chuck size	170	200	250	315	400
A	70	80	90	90	125
B	60	65	75	75	105
C	26,5	31,5	41,5	41,5	46,5
D	20	20	30	30	30
E	25	30	30	30	40
b H7	7,94	7,94	12,7	12,7	12,7
c h6	12,68	12,68	19,03	19,03	19,03
f	24	32	36	36	48

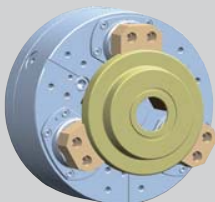


Examples for machined clamping jaws

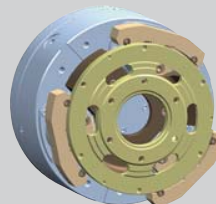


Jaws KBF-N

Examples for applications:



Fixed jaws:
For exact clamping of flange-like workpieces, e.g. wheel hubs, spur gears, etc.



Optionally with pendulum jaws:
For clamping deformation-sensitive raw parts, e.g. coupling pressure plates or sprockets

Configure your individual clamping jaws online! www.web2product.biz