



Precision clamping chucks

for metrology, EDM, laser applications,
jewelry making...

Stainless hand-operated chucks

for EDM, metrology, ..

Benefits at a glance

Only 3 different components
simple assembly,
easy to clean

repetitive clamping accuracy $\leq 0,005\text{mm}$
radial runout $\leq 0,02\text{mm}$

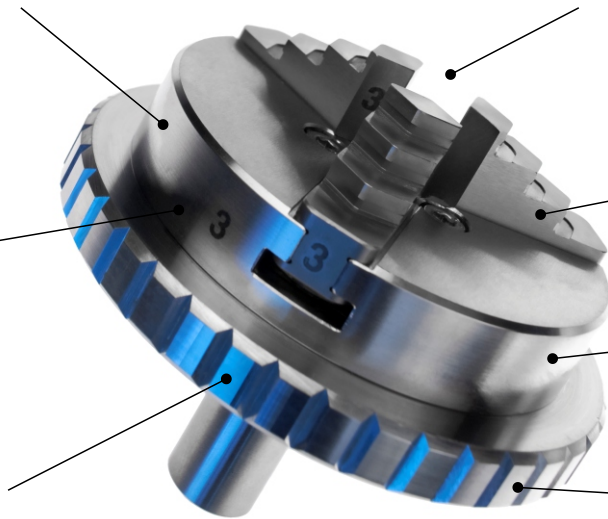
stainless
steel

hardened, ground,
reversible jaws

60% flatter than
standard chucks

easily demagnetisable

clamping without the need
for additional tools by
turning the clamping ring



Applications



metrology

measurement of gearbox shafts
measurement of spindles
testing of needles and cannulas



electrical discharge machining

wire erosion with rotating spindle
usage as work piece holder in
dividing machines



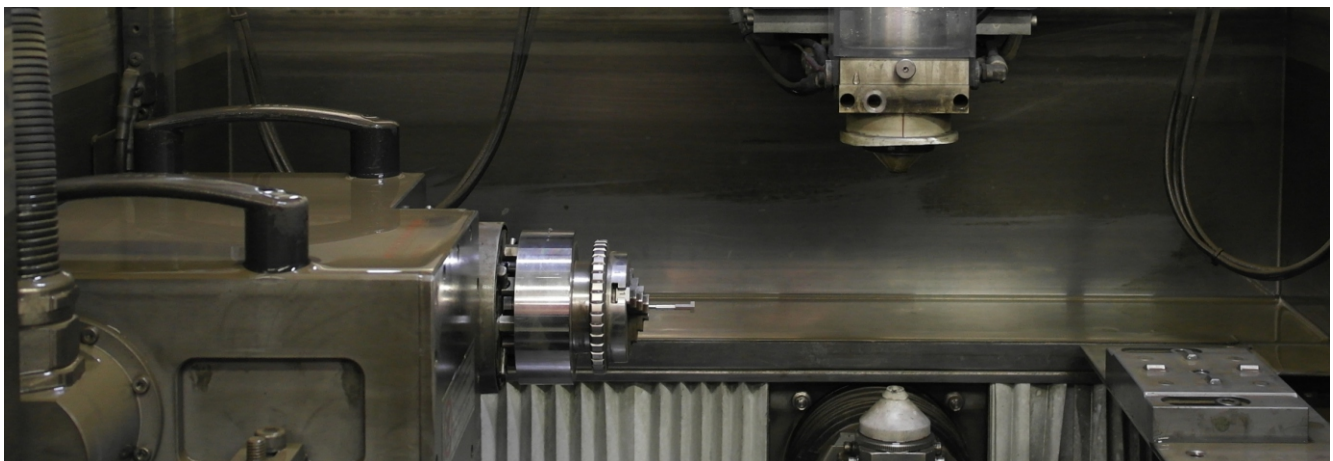
underwater applications

ultrasonic testing
ultrasound cleaning



laser / electron beam

laser marking
laser welding



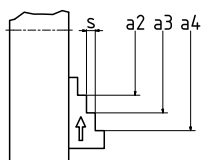
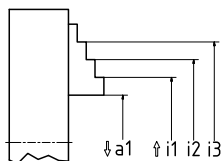
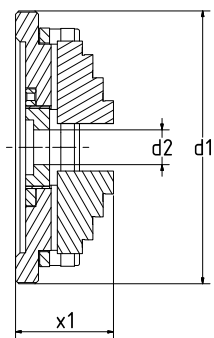
Application example: DBF63 in a wire EDM system with rotating spindle

Stainless hand-operated chucks

for EDM, metrology, ..

All chucks of this type are made of stainless steel. The chucks are built to be flat and light. The adjustment of the chuck is done by turning the clamping ring. Thus a fast clamping can be done by hand - without the need for any additional tools.

Dimensions



outer dim. ¹	DBF34	DBF55	DBF63	DBF100	DBF140	DBF160
d ₁	35	55,5	69,5	119	138	159
d ₂	12	11	8,2	15,2	58	23
x ₁	18,5	29,8	29,25	42,7	43,6	56,8

clamping range¹

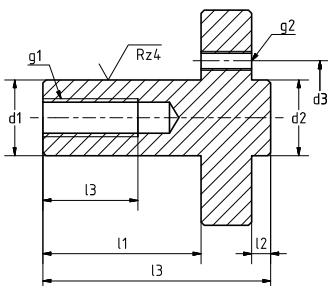
i ₁	11-23	13-28	12-32	20-60	24-68	24-82
i ₂	-	23-28	24-44	40-80	54-98	52-110
i ₃	-	33-48	36-56	60-100	84-128	80-138
a ₁	0-14	0-16	0-20	0-40	0-44	0-56
a ₂	20-32	12-24	15,4-32	30-74	30-74	30-80
a ₃	-	22-34	27,4-44	60-104	60-104	58-108
a ₄	-	32-44	39,4-56	90-134	90-134	86-136
s	4,5	3	3	4,5	4,5	7

additional information

weight ²	85g	280g	380g	1,6kg	2,2kg	5,0kg
jaws	hardened, ground, reversible					

standard fixture³

d ₁ / l ₁	14h6 / 30	16h6 / 18	12h6 / 25	18h6 / 37,5	⁻⁴	25h6 / 45
d ₂ / l ₂	14h6 / 3	14h6 / 3	12h6 / 3	24h6 / 3	⁻⁴	28h6 / 3
g ₁ / l ₃	Ø12 through	Ø11 through	M5 / 12	M6 / 15	⁻⁴	M8 / 15
g ₂ / d ₃	3xM2 / Ø16,5	3xM3 / Ø18	3xM3 / Ø18	3xM4 / Ø30	⁻⁴	3xM6 / Ø36
l ₃	36	26	36	52,5	⁻⁴	60



¹ drawings and CAD-data can be found on our website www.kochmaschinenbau.de

² weight without fixture

³ special fixtures available on demand

⁴ chuck is delivered without fixture by default

Watchmaker lever scroll chucks

for jewelry and watchmaking

The chucks are especially suited for light and precise work with low clamping forces in individual construction. Tensioning the work pieces is performed by turning the geared scroll without a key.

Applications

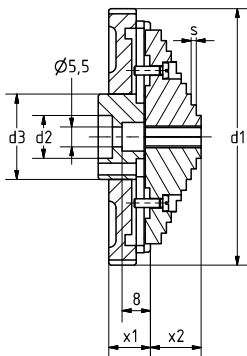


watches
polishing housing parts
precision turning of individual parts



jewelry
turning of rings
engraving of rings

Dimensions

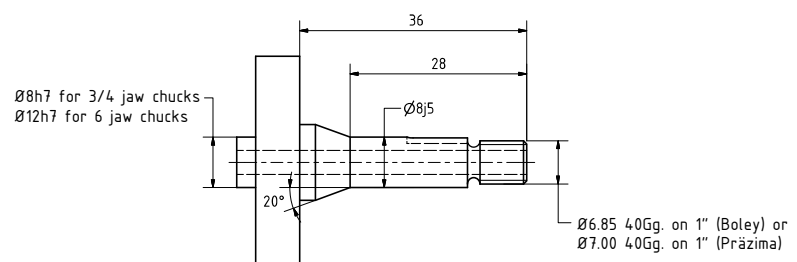


outer dimensions	DF56/3	DF56/4	RF 75	StF75	6-BF75	U6-BF75
d_1	55,5	55,5	75	75	75	75
d_2 / d_3	8H6 / 35	8H6 / 35	12H6 / 24	12H6 / 24	12H6 / 24	12H6 / 24
x_1	15	15	12	12	12	12
clamping range						
rings inner \varnothing	12-50	12-50	10-65	-	-	-
discs outer \varnothing	8-49	8-49	-	8-65	-	36-50
biggest twist-out \varnothing	-	-	-	-	66	50
s	1,6	1,6	1,4	1,4	-	1-2
x_2	8	8	14	13	13	8

additional information

jaws	hardened	hardened	twist-out	twist-out	twist-out	twist-out
fixture	All types can be delivered with mounting shank for watchmaker lathes:					

- $\varnothing 8$ mm thread 6,85x40 Gg., e.g. Boley & Leinen
- $\varnothing 8$ mm thread 7x40 Gg., e.g. Andrä&Zwingenberger, Präzima, Saupe&Sohn



Custom made chucks

Stainless hand-operated chucks

All chucks can be customized and a number of different varieties can be manufactured. We will develop a concept on the basis of your requirements.

Fixtures

All chucks can be delivered with fixtures specifically designed for your needs. A wide variety of fixtures has already been constructed and manufactured.



adaptor for Hirschmann
PrisFix



morse taper fixture



special fixture with fine adjustment and
special jaws

Jaws

Special jaws can be manufactured individually based upon your requirements. The jaws can be made out of different materials such as aluminum, bronze or high strength plastic PEEK.

Jaws with special shapes - specifically designed for your demands - can be constructed and manufactured.



DBF100 with bronze jaws



jaws for DBF160 made out of
PEEK (high-performance plastic)

Marking

All chucks can be produced with special imprints such as your company logo.



imprint on customer demand

»» Präzision von Anfang an

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