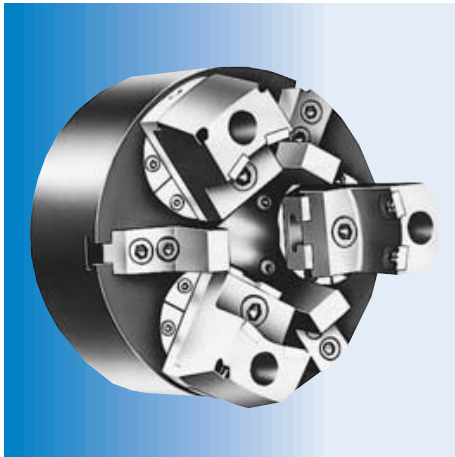


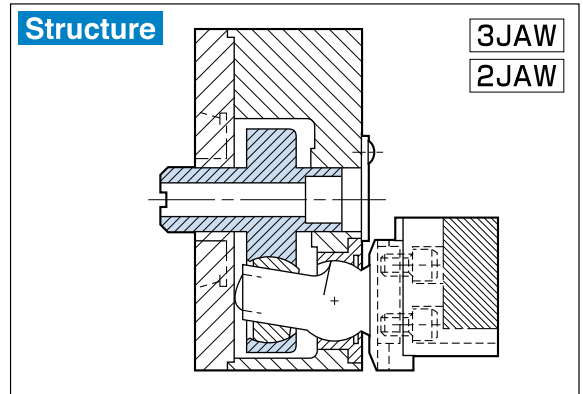
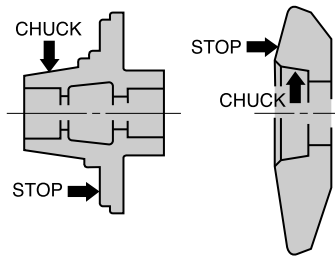
SWING TYPE [Pull Back Action]

UBL Centralizing type chucks

1171 Budapest Strázsashegyi dűlő 7.
T: 00 36 1 365 1091 F: 00 36 1 365 1092
idh@idohmen.hu www.idohmen.hu



The UBL Centralizing type chucks employ a common clamping method, using the clamping part as a concentricity reference and the stop face as an end face reference. They are capable of clamping such difficult-to-clamp work-pieces as tapered (20 degree max.) surfaces of casting or forging products, holding them tightly even under heavy duties, 2 jaws type and 3 jaws type are available and every UBL chucks can correspond to both I.D. or O.D. clamping which can be easily converted from each other (see page 3.) We are liable to design and produce chucks according to your request such as troublesome body modification and every top tooling (jaws, stoppers etc...). UBL chucks include a wide variety of designs, such as carbide insert jaws and special shaped jaws for material operation (see page 9), wide type jaws for thin-walled work-pieces, high-tension aluminum jaws for high-speed rotation, an combination jaws and quick change jaws for small-lot production (see page 9.)



Practical examples

● **Vast variation** 5 inch size power chuck, big size dia through hole power chuck, long stroke power chuck, combination chuck can be supplied.

Overhung work-piece	Tapered surface work-piece	Thin-walled work-piece	Un-balance work-piece

2 jaw for machining Yoke

2JAW

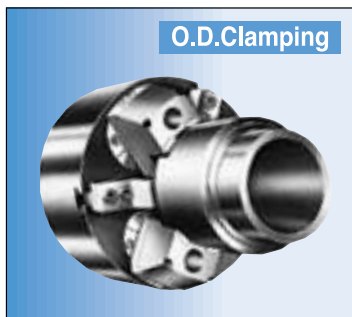
Special type centralizing chuck

6JAW

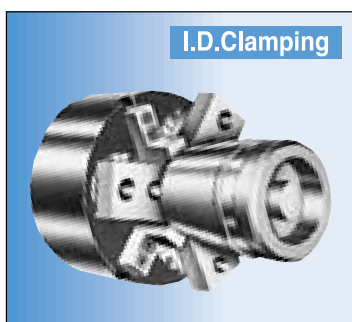
This UBL 6-Jaw Ball Lok Chuck is designed to enable easy conversion of UBL between O.D. clamping and I.D. clamping. Using quick change jaws at the inside and outside jaws will further reduce your loss time for jaw replacement. For easier maintenance, the smallest 10" model employs same parts as UBL-6, except for the actuator.

Centralizing type

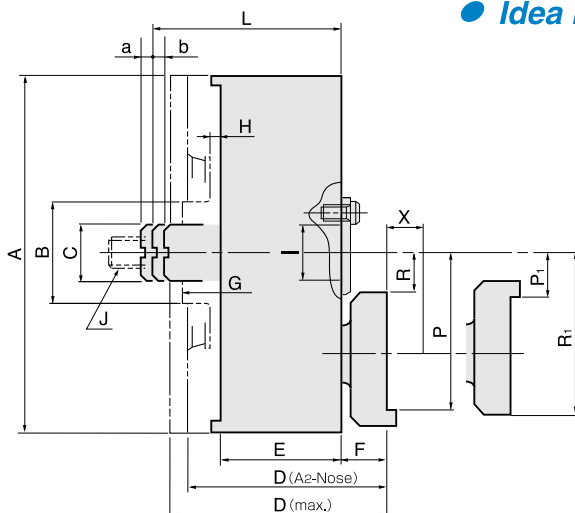
Specification of standard type



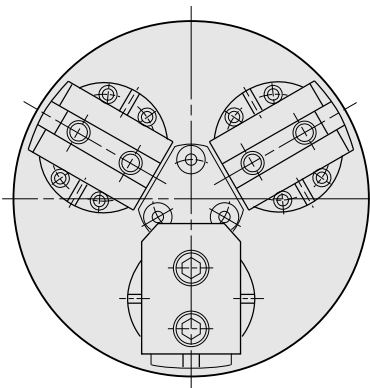
O.D. Clamping



I.D. Clamping



● Idea in design to "PULL-BACK"



- Adapters to be fixed to the end of machine spindle and top tools such as jaws, stoppers are available.
- 5 inch size or long stroke type chucks are also standardized.

Standard dimensions

Model No.	A	B min.	C	D (1)		E	F	G min.	H min.	I
				(A2-Nose)	(max)					
UBL-6	162	41.1	30.16	96.8	104.6	59.2	19.3	19.8	4.8	30.170 ^{+0.005} ₀
UBL-8	200	45	31.75	113.6	126.3	70	23.3	21.5	6	31.76 ^{+0.003} _{-0.002}
UBL-10	254	58	41.27	141.2	148	86.6	29.1	26	7	41.285 ^{±0.0025}
UBL-12	300	58	41.27	141.2	148	86.6	29.1	26	7	41.285 ^{±0.0025}
UBL-15	381	83	57.16	152.4	174	96.1	32.4	36.6	7	57.16 ^{±0.005}
UBL-18	457	120.7	88.90	152.4	174	96.1	32.4	36.6	7	88.90 ^{+0.01} ₀
UBL-21	533	120.7	88.90	157.2	174	96.1	32.4	36.6	10	88.90 ^{+0.01} ₀

Model No.	J	L Clamp position	a b		P	(2) R (Standard)	P1	R1	X Basic Height
			(Stroke)						
UBL-6	M16	95.8	5.1	6.2	73.15	17.3	22.2	78	24.9
UBL-8	M16	112	8	6.4	88.95	22.1	25.3	92.2	29.4
UBL-10	M18	131.5	8	9.5	112.7	30	30.1	112.7	36.5
UBL-12	M18	131.5	8	9.5	133.27	50.6	50.7	133	36.5
UBL-15	M24	155.4	10.3	12	171.45	65.8	69.8	176	41.9
UBL-18	M24	155.4	10.3	12	209.55	103.9	107.9	213.6	41.9
UBL-21	M24	155.4	10.3	12	247.65	142	146.0	252	41.9

Standard specifications

Model No.	Standard clamping force kN (kgf)	Cylinder critical force kN (kgf)	Jaw stroke (Dia.) mm	Standard clamping range mm		Chuck weight kg	Body GD ² N·m ² (kgf·m ²)
				O.D.	I.D.		
UBL-6	64.7 (6600)	21.6 (2200)	7.9	12.7~120	70~152	18	1.47 (0.15)
UBL-8	85.3 (8700)	28.4 (2900)	9.5	16~152	76~203	27	4.70 (0.48)
UBL-10	105.8 (10800)	35.3 (3600)	12.7	50~203	85~235	45	12.05 (1.23)
UBL-12	105.8 (10800)	35.3 (3600)	12.7	63~241	127~305	67.5	23.72 (2.42)
UBL-15	161.7 (16500)	53.9 (5500)	15.8	76~317	165~381	84.5	83.20 (8.49)
UBL-18	161.7 (16500)	53.9 (5500)	15.8	89~394	241~457	120	148.67 (15.17)
UBL-21	161.7 (16500)	53.9 (5500)	15.8	162~470	317~533	180	245.00 (25.00)

(1) Fitting portion and bolt holes of adapters are to be machined, depending on the machine spindle.

(2) Dimension R can be enlarged by cutting of jaw actuator's end.

* Dimensions are the same for both 3 jaws and 2 jaws applications. For 2 jaws types, UBL-6 to UBL-15 are readily available.

* In the 2 jaws application, standard clamping force and actuator's critical force tensile are 60%.

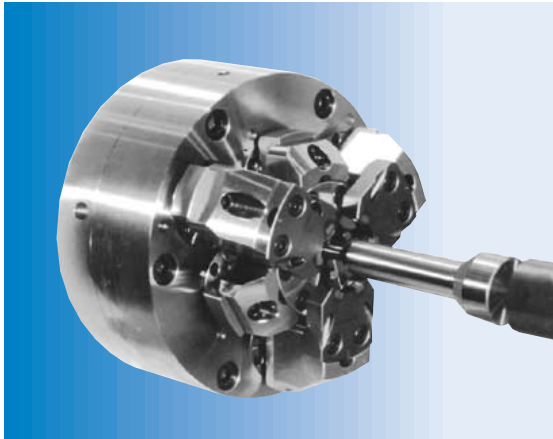
* Rotating speed and draw bar thrust are different, depending on the operation conditions.

These speed and propulsive force are shown by us.

Swing-type Combination Design Chuck

UBL - 6JAW Centralizing & Compesating

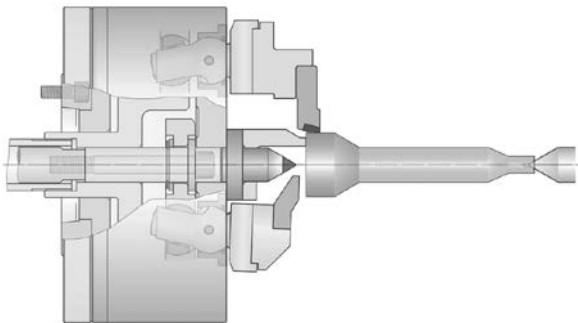
Only 1 unit of chuck can machine various shaft work-pieces without change-over in NC lathe.



The UBL-6Jaw CENT & COMP type chuck is a swing type combination chuck which contains CENT Centralizing and COMP Compensating features in 1 unit of chuck.

※ The FJD [Face Driver & Jaw Escaping type Chuck] is also available for machining of the whole circumstance of shaft work-pieces.

OP-1 Centralizing type

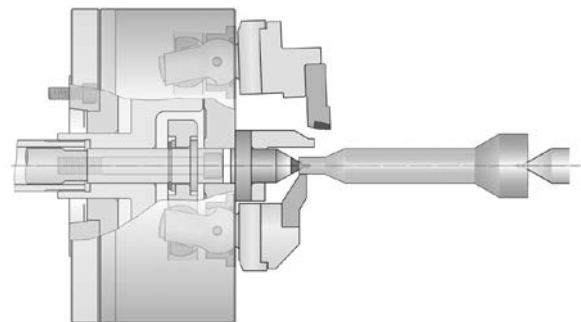


Set the height of the stop so the shaft work-piece does not interfere to the jaw and the fixed center in next operation.

And clamp with reference to the end face of the work-piece and the circumstance of big diameter by UBL 3JAW CENT [Centralizing].

The carbide inserts are attached on the top of the jawpieces to correspond to bigger cutting torque.

OP-2 Compensating type



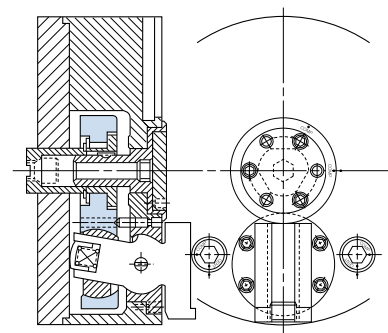
Return the shaft work-piece and do finish operation with clamping the small diameter (already finished portion in OP-1) by UBL 3JAW COMP [compensating] with reference to the both center by fixed center and tail center.

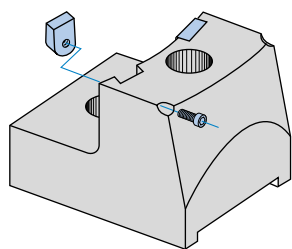
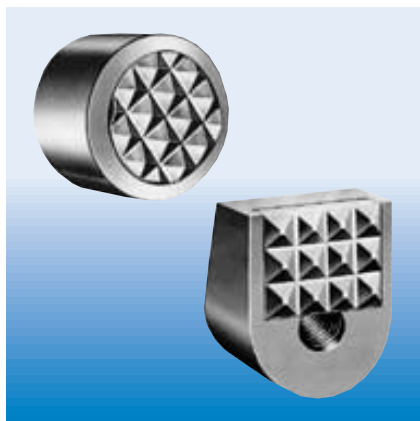
The jaw is hardened type not to scratch the finished surface.

UBL ON-OFF type

[Switchable between Centralizing and Compensating]

Generally, work-pieces using the clamping part as a reference and those using a both holes or both centers as a reference require different chucks. The ON-OFF types are designed as ball-lok chucks to accommodate such varied needs, by enabling easy and quick switching between the "centralizing type / centripetal type" and the "compensating type / center offset type" with an L wrench. UBL on-off types are standardized from 10" and 12" types [3-jaws and 2-jaws] ; therefore, dimensions, specifications, and major parts, are common in consideration of their interchangeability.





Fitting

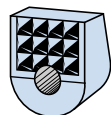
It is possible to replace top jaw of the UBL chuck, and therefore top soft jaws shall be shaved into suitable shape for particular work-pieces. Replaceable inserts shall be fitted to these top jaws to increase life of them and reduce their inventory. There are two available types of insert, (Angle-Lok style and Round style) both of them can be easily replaced.

Carbide insert for UBL CHUCKS

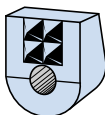
High durability, High clamping torque, Easy exchange

Variety of inserts

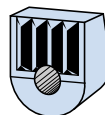
Angle-Lok style



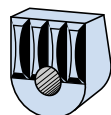
PC127-10SC



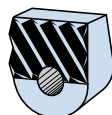
PC127-4SC



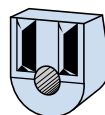
PC130-4SC



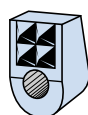
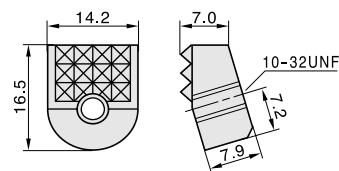
PC132-4SC



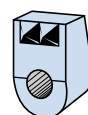
PC145-5SC



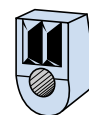
PC130-2SC



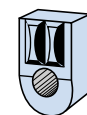
PC127-4SC-S



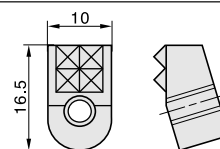
PC127-2SC-S



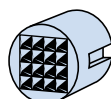
PC130-2SC-S



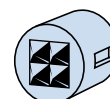
PC132-2SC-S



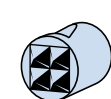
Round style



PC070-12SC



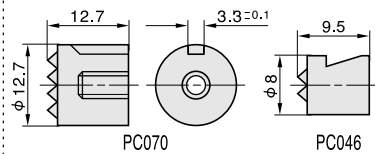
PC070-4SC



PC046-4SC



PC050-4SC
(ϕ 5 x 7)



* Each carbide insert is chosen according to the requirements of a work-piece.



For outer surface clamping PAT.



Outer surface clamping

Quick (change) jaws for UBL CHUCKS PAT.

Time saving to jaws changes has been realized

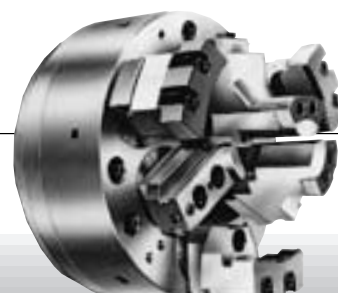
..... These jaws can be also used for presently using chucks.

• Suitabilities to many kinds of work-pieces.

- Stable clamping can be obtained, as back face is supported by base jaws.
- No need of L wrench, tools, etc...
- These jaws can be used for UBL chucks which have already delivered.
- Exchange of jaws can be made within only 1 minute.

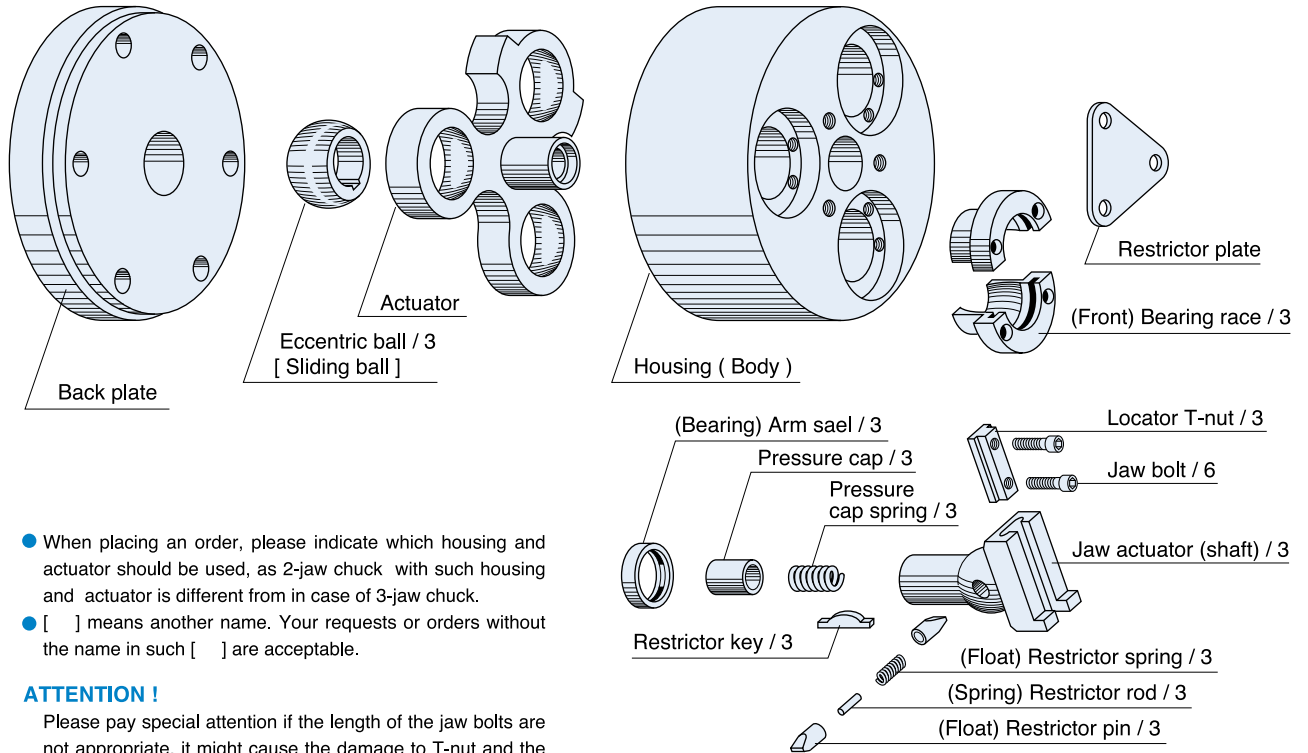
Suitable for inner surface clamping

Examples : 6 jaw (Special type)



Component parts

Centralizing type 3JAW

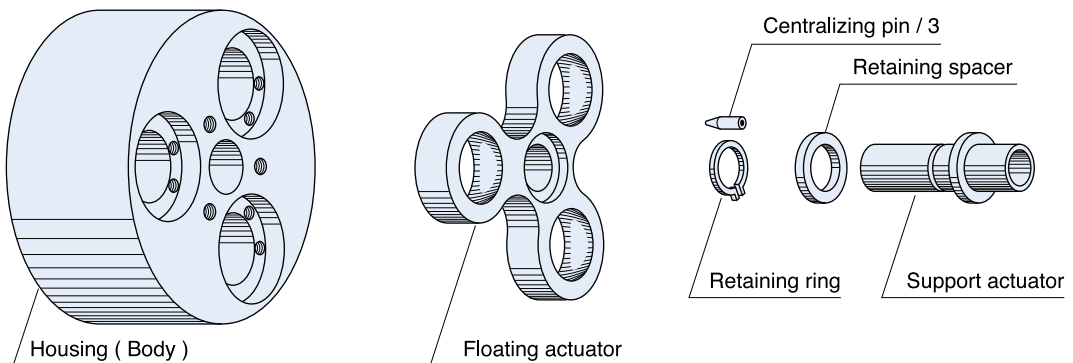


- When placing an order, please indicate which housing and actuator should be used, as 2-jaw chuck with such housing and actuator is different from in case of 3-jaw chuck.
- [] means another name. Your requests or orders without the name in such [] are acceptable.

ATTENTION !

Please pay special attention if the length of the jaw bolts are not appropriate, it might cause the damage to T-nut and the deformation of jaw actuator.

Compensating type 3JAW



- Only the parts of the Compensating type shown in this figure are different from those of the Centralizing type. Also, a different type of pressure cap spring is employed by the Compensating type. All the other parts are the same with the Centralizing type.
- As for the 2-jaw model, different types of housing and actuator are employed.