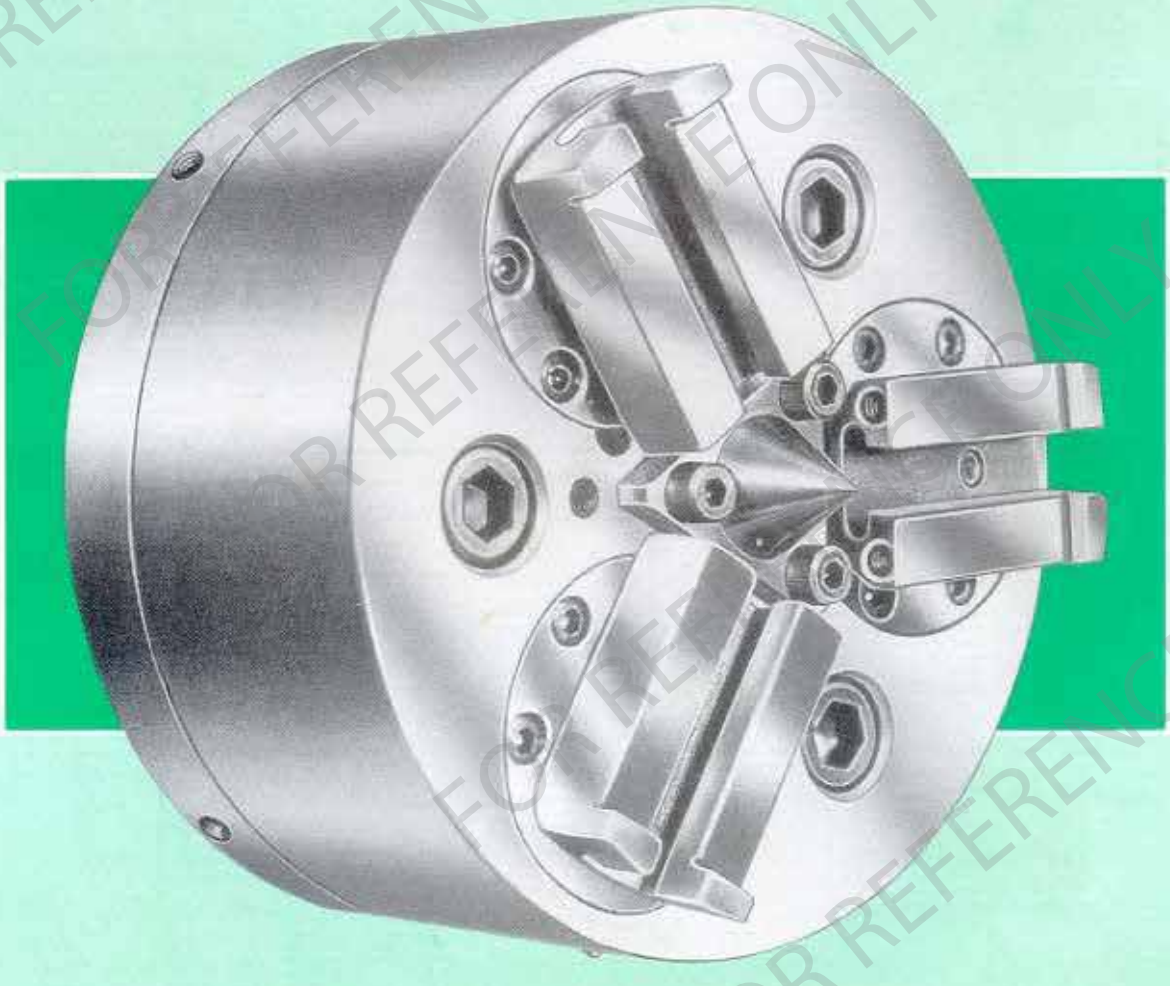
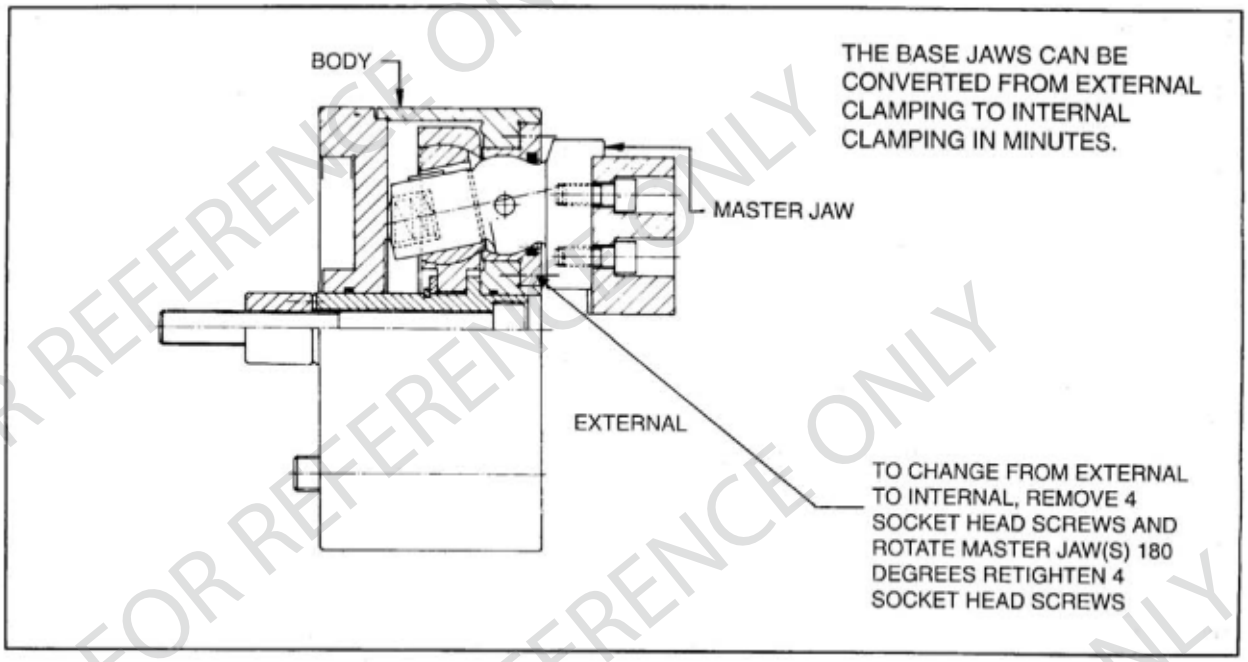
UNIVERSAL
BALL LOCK CHUCK



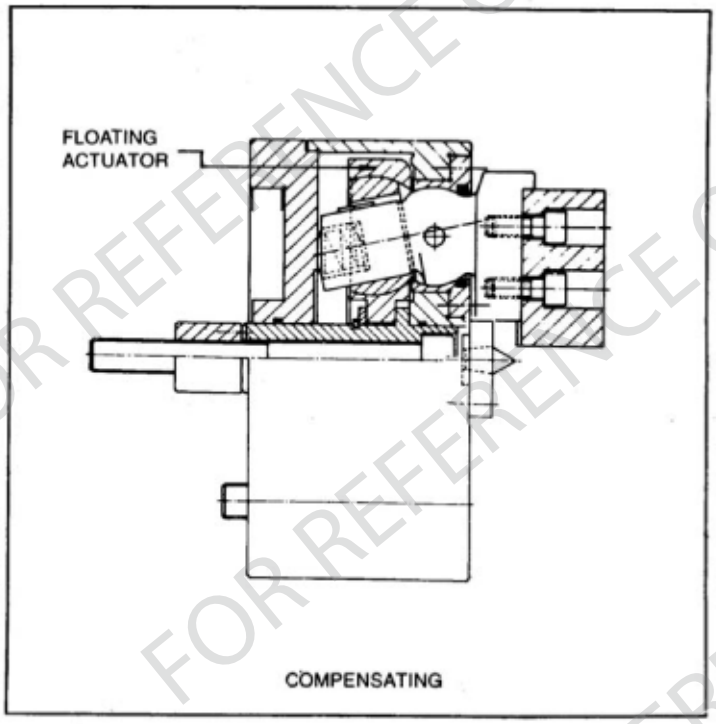
Ball Lock Chucks have certain distinctive advantages over wedge and lever type chucks. Jaw movement is achieved by sliding and swivel of the base jaws, which are amply proportioned. This results in less wear, less bearing pressure and less stress concentration in the jaws when compared to same sizes of wedge or lever type chucks. Apart from the radial clamping forces, these chucks provide an axial force to pull the component against the butting face. This is achieved as the jaw movement is along an arc.

Wedge, base jaw, spherical aligner, spherical bushes are made of Nickel Chrome Steel, case hardened and precision ground on all working surfaces.



The Ball lock chucks are offered in two styles:

1. Self Centering
2. Eccentric Compensating



Eccentric compensating type of chuck is essentially designed where the component is usually located between two centres, one on the chuck body and one on the tailstock of the machine. Since the line of the centres is defined, concentricity is guaranteed and the chuck design allows adequate freedom for the jaws to adjust and accommodate the irregularities of the job before full clamping force is applied.

TOP JAWS

Hard or Soft jaws for universal ball lock chucks are to be made as per the configuration of the job.

The top two jaws are offered in two styles

i) SPECIAL HARD AND SOFT JAWS

These jaws are fastened to the base jaws by means of T-nuts.

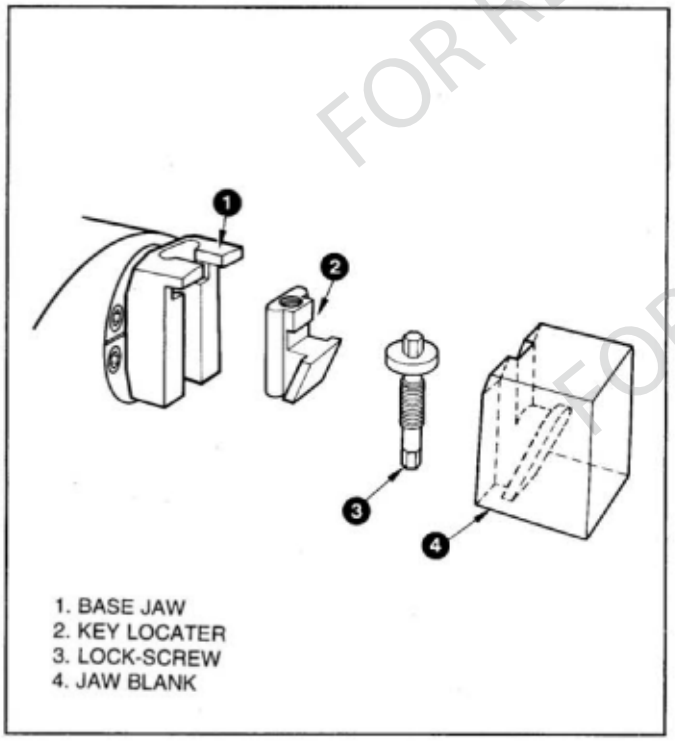
ii) QUICK CHANGE JAW SYSTEM (OPTIONAL)

The ball lock chucks can also be provided with the quick-change top jaws. The quick change design for either O.D. or I.D. clamping incorporates accurate positioning of the top jaw to the base jaw. A built in safety feature prevents the top jaws from accidentally being separated from base jaw.

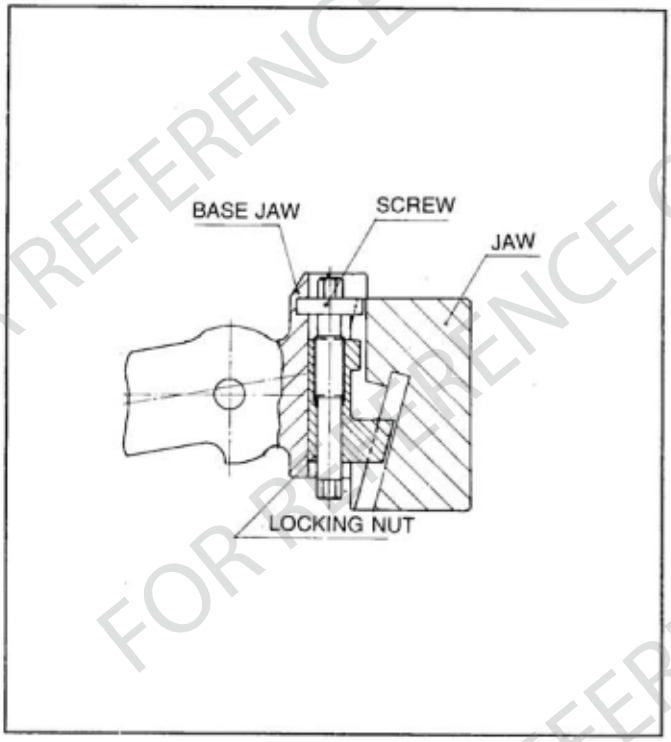
Top Jaws are mounted by turning a screw one full turn clockwise. To release the top jaws, unscrew by one full turn counter-clockwise.

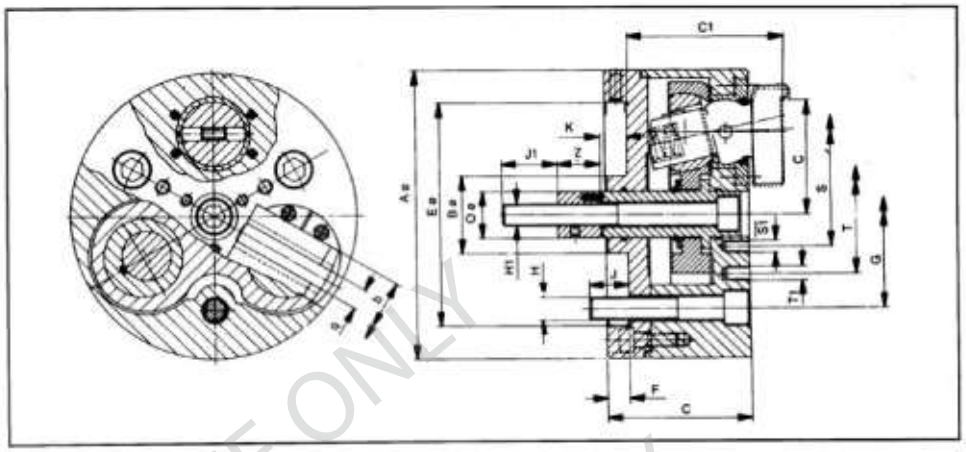
All three jaws can be changed quickly. This design also allows more reboring of jaws as the design eliminates drilled and counterbored holes. The quick change jaw factor makes this design ideal for small batch production.

Chuck will be supplied with one number allen key for mounting screw and one allen key for base jaw. Neither Hard Jaws nor Soft Jaws will be supplied with the chuck. Special Hard Jaws and Soft Jaws and solid centre can be supplied on request at extra cost, to suit applications.



1. BASE JAW
2. KEY LOCATER
3. LOCK-SCREW
4. JAW BLANK





DIMENSIONAL SPECIFICATIONS (All dimensions in mm)

MODEL NO.	28-31	28-32	28-33	28-34	28-35	28-36
Size Ø	152	203	254	304	381	457
A Ø	162	200	254	298.45	381	457
B Ø	54	54	70	80	100	120
C	79	100	117	117	126	126
C1	83.3	108.47	130.92	130.92	155.5	155.5
E Ø H7	120	135	200	235	300	380
F	15	15	15.3	15.3	15	15
G (PCD)	104.8	130	171.4	171.4	235	330
H	M10x3	M16x3	M16x3	M16x3	M24x6	M24x6
H1	M16	M16	M18	M18	M24	M24
J	17	24	26	26	36	36
J1	45	45	45	45	60	60
K min	19	17.4	24	24	35	35
K max	32	31.9	42.2	42.2	60	62
O Ø	31.5	31.5	40	40	46	46
S	44	44.6	78.1	108	139.7	165.1
S1	M6	M8	M12	M12	M12	M12
T	69	81.9	127.8	158.8	190.5	215.1
T1	M8	M10	M12	M16	M16	M16
Z	25	25	30	30	30	30
b g 6	38.1	44.45	57	57	66.68	66.68
C	73.15	89	112.45	112.45	171.45	209.55
q H7	9.5	14.5	19.5	19.5	23.5	23.5
Max Drawbar Pull (Kgf)	2700	3600	5000	5000	8000	10000
Wedge Stroke	13	14.6	18.2	18.2	25	27
*** Diametrical Compensation**	2	2	2.5	2.5	3.2	3.2
Weight (Kg) (approx.)	11.5	25	39	55	118	145.5

Each Chuck (Self centering and Eccentric compensating) supplied with 1 set of clamping screws and special allen key for tightening the screw with draw bar.

* For Eccentric compensating chucks only

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