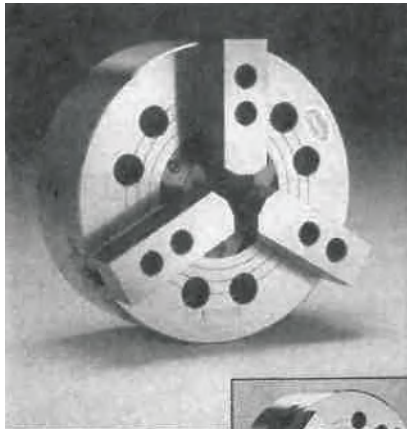


KITAGAWA WORKHOLDING SYSTEMS

INDEX

	JN Series Scroll Chucks		NL/NLT Series Closed Center - Long Stroke Chucks		S & SL Series Large Bore - High Speed Cylinders
	IC Series Four-Jaw Independent Chucks		PW Series Power Wing Chucks		SS Series Hydraulic Cylinders
	B & BT Series Std. Thru-Hole Chucks		PU200 & PUE Series High Precision Pull Back Chucks		M Series Hydraulic Cylinders
	B200 & BT200 Series Large Bore - High Speed Chucks		LU Series Three-Jaw Pull Style Chucks		YR & YRE Series Closed Center Cylinders
	B300 Series High Speed Technology Power Chucks		HW Series Four-Jaw - Self-Centering Chucks		YS Series Stationary Air Cylinders
	BB Series Extra Long Bore Power Chucks		YW Series Two Stage Hyd. Cylinders		AY Series High Speed Air Cylinders
	BL200 Series Long Stroke - Lever Style Chucks		CR & CR-LQ Series Collet Chucks		AS & AT Series Work Grippers
	QB300 Series Quick Jaw Change Chucks		FG Series High Speed - Wheel Chucks		
	HOH Series Counter Balanced Chucks		UVE (-AR, -K, -LB) Series Extra Large Bore Self-Contained Air Chucks		
	N Series Closed Center Chucks		RC Series Self-Contained Air Chucks		
			FH & FHP Series Std. Thru-Hole Cylinders		



B Series



BT Series

B & BT SERIES

POWER CHUCKS

Three-jaw and two-jaw wedge style power chucks are ideal for high speed chucking, bar chucking and universal machining. These deliver consistent accuracy and repetitive chucking.

U.S. Patent No. 4410192

Special Features

- Large Thru-Hole
- Compact and Lightweight
- Strong Clamping Force
- Direct Mount
- High Speed
- High Accuracy and High Endurance

SPECIFICATIONS

MODEL	UNIT	B-15AD8	B-15A11	B-18AOB	B-18A11	B-21A11	B-21A15	B-24A11	B-24A15
Spindle Nose		A2-8	A2-11	A2-8	A2-11	A2-11	A2-15	A2-11	A2-15
Thru- Hole	in.	4.626	4.626	4.626	4.626	5.512	5.512	6.496	6.496
Jaw Stroke (Diameter)	in.	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417
Plunger Stroke	in.	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906
Max. Draw Bar Pull Force	lbs.	15639	15639	15639	15639	19824	19824	19824	19824
Max. Gripping Force	lbs.	39648	39648	39648	39648	51542	51542	51542	51542
Max. Speed	rpm	2500	2500	2000	2000	1700	1700	1400	1400
Net Weight	lbs.	245.8	230.6	405.0	380.0	540.7	528.6	638.8	627.8
GD ²	lbs. -ft.²	216.9	208.6	471.8	452.8	908.1	877.2	1628.8	1598.0
Matching Cylinder		F2511H	F2511H	F2511H	F2511H	F2511H	F2511H	F2511H	F2511H
Matching Soft Top Jaw		SB15C1	SB15C1	SB15C1	SB15C1	SB18A2	SB18A2	SB18A2	SB18A2
Matching Hard Top Jaw		HB15A1	HB15A1	HB15A1	HB15A1	HB18B2	HB18B2	HB18B2	HB18B2

Note: Specifications are subject to change without notice due to ongoing research and development.

Model B and BT Series Chucks are manufactured from high grade alloy steel. All siding surfaces are hardened and ground to assure consistent accuracy and performance.

Lubrication nipple in each base jaw.

Master Jaw Serration:

Chuck size 6" to 18": 1.5mm x 60°

Chuck size 21" & 24": 3mm x 60°

Mounting:

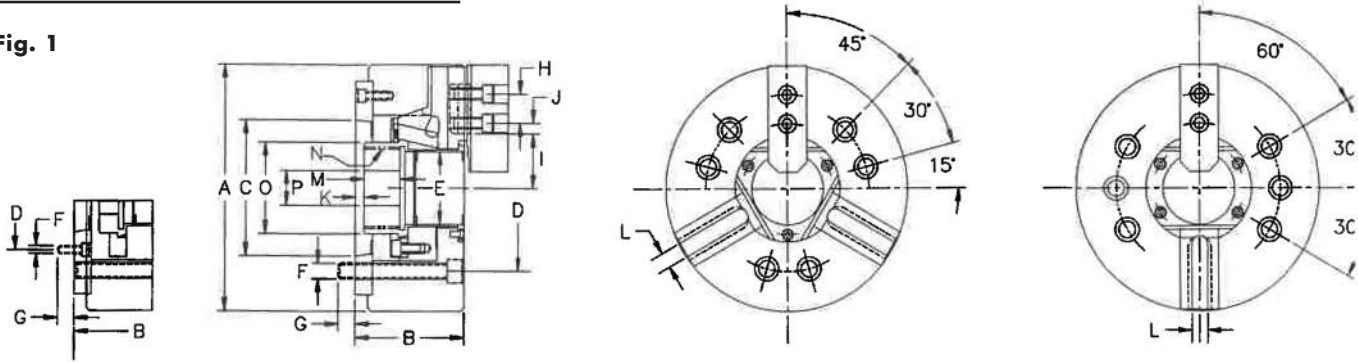
Direct mounting to fit ASA B5.9 type A (Interchangeable with DIN 55026).

Standard Equipment:

Chuck assembled with adapter, chucks mounting bolts, soft top jaws, T-nuts and jaw mounting bolts with wrench draw nut wrench.

DIMENSIONAL DRAWINGS

Fig. 1



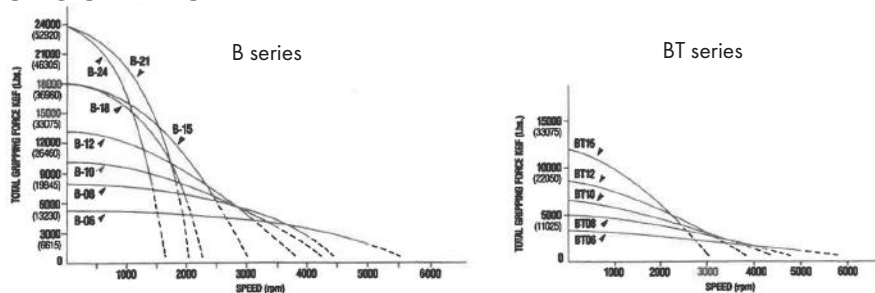
DIMENSIONS (Dimensions in inches)

MODEL	B-06A05	B-08A06	B-10A06	B-10A08	B-12A06	B-12A08	B-15A08	B-15A11	B-18A08	B-18A11	B-21A11	B-21A15	B-24A11	B-24A15
A	6.496	8.268	10.000	10.000	11.969	11.969	15.000	15.000	17.717	17.717	20.866	20.866	24.016	24.016
B	3.661	4.055	4.724	4.449	5.079	4.803	6.299	5.866	6.299	5.866	6.890	6.339	7.244	6.693
C	3.250	4.188	4.188	5.501	4.188	5.501	5.501	7.751	5.501	7.751	7.751	11.250	7.751	11.250
D	4.125	5.250	5.250	6.750	5.250	6.750	6.750	9.252	6.750	9.252	9.252	13.000	9.252	13.000
E	1.299	1.811	2.559	2.559	3.071	3.071	4.626	4.626	4.626	4.626	5.512	5.512	6.496	6.496
F	6xM10	6xM12	6xM12	6xM16	6xM12	6xM16	6xM16	6xM20	6xM16	6xM20	6xM20	6xM22	6xM20	6xM22
G	0.551	0.709	0.728	0.984	0.728	0.984	0.945	1.102	0.945	1.102	1.181	1.339	1.181	1.378
H	0.787	0.9841	1.181	1.181	1.181	1.181	1.693	1.693	1.693	1.693	2.362	2.362	2.362	2.362
I max.	1.083	1.406	1.969	1.969	2.283	2.283	3.228	3.228	3.228	3.228	3.878	3.878	4.252	4.252
I min.	0.974	1.260	1.795	1.795	2.075	2.075	3.020	3.020	3.020	3.020	3.669	3.669	4.043	4.043
J max.	1.015	1.231	1.271	1.271	1.921	1.921	1.724	1.724	3.083	3.083	3.448	3.448	4.630	4.630
J min.	0.424	0.522	0.502	0.502	0.502	0.502	0.719	0.719	0.719	0.719	0.847	0.847	0.847	0.847
K max.	0.984	0.787	0.748	0.472	1.299	1.024	0.732	1.299	1.732	1.299	2.047	1.496	2.402	1.850
K min.	0.512	0.157	0.0	-0.276	0.394	0.118	0.827	0.394	0.827	0.394	1.142	0.591	1.496	0.945
L	0.472	0.551	0.630	0.630	0.709	0.709	0.866	0.866	0.866	0.866	0.984	0.984	0.984	0.984
M	0.787	0.984	1.181	1.181	1.299	1.299	1.299	1.299	1.299	1.299	1.299	1.299	1.378	1.378
N Max	M42x1.5	M55x2.0	M75x2.0	M75x2.0	M88x2.0	M88x2.0	M130x2.0	M130x2.0	M130x2.0	M130x2.0	M155x3.0	M155x3.0	M75x3.0	M175x3.0
O	1.929	2.402	3.327	3.327	3.780	3.780	5.472	5.472	5.472	5.472	6.693	6.693	7.362	7.362
P	0.630	1.181	1.772	1.772	1.969	1.969	2.362	2.362	2.362	2.362	3.150	3.150	3.150	3.150

B-10A06, B-12A06, B-15A08, B-18A08, B-21A11, B-24A11, BT10A06, BT12A06 and BT15A08 are referred to in Fig.1. Draw nut is supplied without thread.

Note: Specifications are subject to change without notice due to ongoing research and development.

GRIPPING CHARACTERISTIC GRAPHS





B200 Series



BT200 Series

B200 & BT200 SERIES

POWER CHUCKS

Three-jaw and two-jaw wedge style power chucks deliver up to 20% more speed, gripping force and bore size when compared to conventional chucks. The B200 Series Chucks have the largest bores of any wedge style power chuck. These deliver consistent accuracy and repetitive chucking.

U.S. Patent No. 4410192

Special Features

- Large Thru-Hole
- Compact and Lightweight
- Strong Clamping Force
- Direct Mount
- High Speed
- High Accuracy and High Endurance

SPECIFICATIONS

MODEL	UNIT	B204	B205	B206A05	B208A06	B210A06	B210A08	B212A06	B212A08	B215
Spindle Nose		3.346	4.331	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8	11.811
Thru-Hole	in.	1.024	1.299	1.772	2.047	2.953	2.953	3.583	3.583	3.937
Jaw Stroke (Diameter)	in.	0.213	0.213	0.217	0.291	0.346	0.346	0.417	0.417	0.572
Plunger Stroke	in.	0.394	0.394	0.472	0.630	0.748	0.748	0.906	0.906	0.928
Max. Draw Bar Pull Force	lbs.	3150	3930	4846	7808	9471	9471	12115	12115	22030
Max. Gripping Force	lbs.	6400	8090	12555	19292	24449	24449	31718	31718	55975
Max. Speed	rpm	8000	7000	6000	5000	4200	4200	3300	3300	2800
Net Weight	lbs.	8.8	14.7	27.1	48.5	81.1	75.1	122.9	117.0	256.1
GD ²	lbs. -ft.²	0.52	1.4	5.2	15.6	29.9	28.9	65.7	64.7	208.8
Matching Cylinder		FO933H	F0933H	S1246	S1552	S1875	S1875	S2091	S2091	F2511H
Matching Soft Top Jaw		SBO4N1	SB05N1	SB06B1	SB08B1	SB10B1	SB10B1	SB12N1	SB12N1	SB15N1
Matching Hard Top Jaw		HB04N1	HB05N1	HB06B1	HB08A1	HB10A1	HB10A1	HB12N1	HB12N1	HB15N1

MODEL	UNIT	BT204	BT205	BT206A05	BT208A06	BT210A06	BT210A08	BT212A06	BT212A08
Spindle Nose	∅ in.	3.346	4.331	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8
Thru-Hole	in.	1.024	1.299	1.772	2.047	2.953	2.953	3.583	3.583
Jaw Stroke (Diameter)	in.	0.123	0.213	0.217	0.291	0.346	0.346	0.417	0.417
Plunger Stroke	in.	0.394	0.394	0.472	0.630	0.748	0.748	0.906	0.906
Max. Draw Bar Pull Force	lbs.	2090.6	2630	3258	5053	6401	6401	8242	8242
Max. Gripping Force	lbs.	4271.2	5390	8535	12577	16621	16621	21562	21562
Max. Speed	rpm	8000	7000	6000	500	4200	4200	3300	3300
Net Weight	lbs.	8.4	14.3	26.7	45.4	76.2	70.3	112.1	106.2
GD ²	lbs. -ft.²	0.57	1.4	5.1	14.7	28.0	27.0	60.0	59.0
Matching Cylinder		F0933H	F0933H	S1246	S1552	S1875	S1875	S2091	S2091
Matching Soft Top Jaw		SBO4N1	SB05N1	SB06B1	SB08B1	SB10B1	SB10B1	SB12N1	SB12N1
Matching Hard Top Jaw		HB04N1	HB05N1	-	-	-	-	-	-

Model B200 and BT200 Series Chucks are manufactured from high grade alloy steel. All sliding surfaces are hardened and ground to assure consistent accuracy and performance.

Lubrication nipple in each base jaw.

Master Jaw Serration:

Chuck size 6" to 12": 1.5mm x 60°

Mounting:

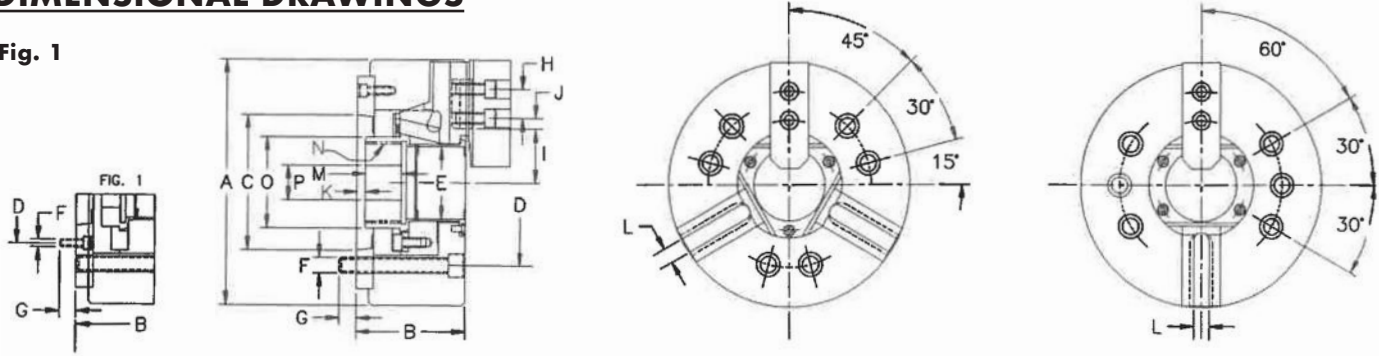
Direct mounting to fit ASA B5.9 type A (Interchangeable with DIN 55026).

Standard Equipment:

Chuck assembled with adapter, chucks mounting bolts, soft top jaws, T-nuts and jaw mounting bolts with wrench, draw nut wrench.

DIMENSIONAL DRAWINGS

Fig. 1



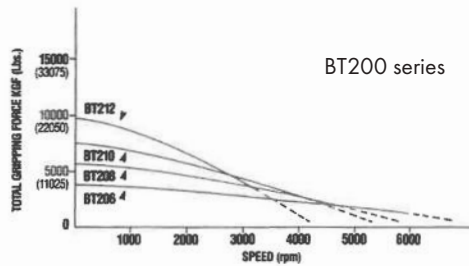
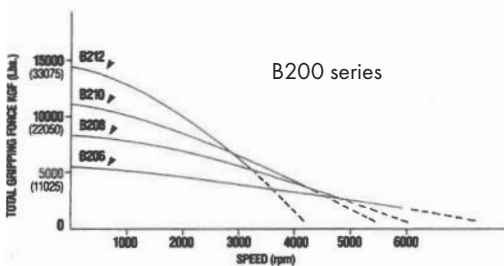
DIMENSIONS

(Dimensions in inches)

MODEL	B206A05 BT206A05	B208A06 BT208A06	B210A06 BT210A06	B210A08 BT210A08	B212A06 BT212A06	B212A08 BT212A08	B215
A	6.654	8.268	10.000	10.000	11.969	11.969	15.00
B	3.583	4.055	4.724	4.449	5.079	4.803	5.787
C	3.250	4.188	4.188	5.501	4.188	5.501	-
D	4.125	5.250	5.250	6.750	5.250	6.750	9.252
E	1.772	2.047	2.953	2.953	3.583	3.583	-
F	6xM10	6xM12	6xM12	6xM16	6xM12	6xM16	6xM20
G	0.630	0.709	0.728	0.945	0.728	0.984	-
H	0.787	0.984	1.181	1.181	1.181	1.181	1.693
I max.	1.260	1.524	2.008	2.008	2.413	2.413	2.756
I min.	1.152	1.378	1.835	1.835	2.205	2.205	2.547
J max.	0.896	1.171	1.329	1.329	1.803	1.803	2.155
J min.	0.364	0.581	0.561	0.561	0.621	0.621	0.797
K max.	1.024	1.240	1.319	1.043	1.299	1.024	0.905
K min.	0.551	0.610	0.571	0.295	0.394	0.118	0.000
L	0.472	0.551	0.630	0.630	0.827	0.827	1.004
M	0.591	0.650	0.787	0.787	0.906	0.906	1.181
N max	M55x2.0	M60x2.0	M85x2.0	M85x2.0	M100x2.0	M100x2.0	M110x2.0
O	2.362	2.598	3.701	3.701	4.252	4.252	4.724
P	0.787	1.181	1.772	1.772	1.969	1.969	1.968

B210A06, B212A06, BT210A06 and BT212A06 are referred to in Fig.1. Draw nut is supplied without thread.

GRIPPING CHARACTERISTIC GRAPHS





QB300 SERIES

QUICK JAW-CHANGE CHUCKS

Three-jaw wedge style power chucks slash downtime and maximize productivity through unique quick change locking mechanism. Jaws can be changed in as little as 30 seconds while delivering consistent 0.0012" accuracy. QB300 Series Quick Jaw-Change Chucks do not require long stroke cylinders and are fully interchangeable with most power chucks

QB300 Series

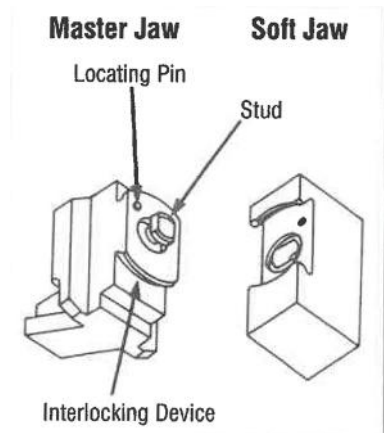
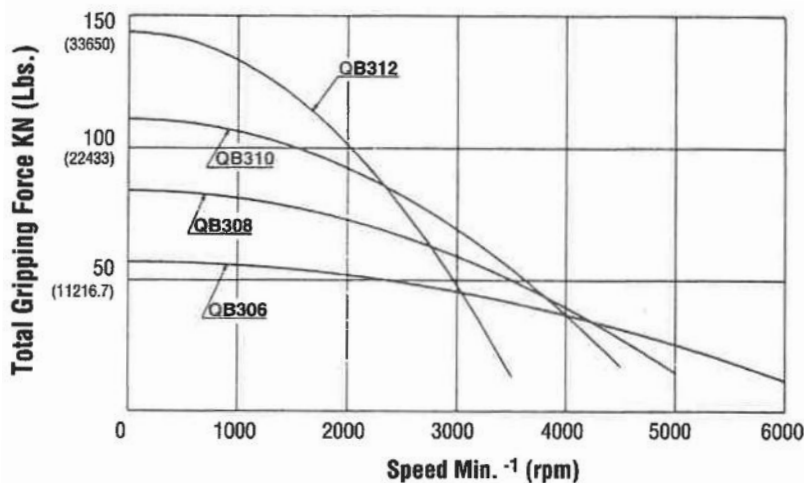
Special Features

- Large Thru-Hole
- Compact and Lightweight
- High Speed
- 30 Second Jaw-Change
- Direct Replacement for Most Power Chucks
- Expensive Base Jaws NOT Required
- High Accuracy and High Endurance
- Long Stroke Cylinder NOT Required

SPECIFICATIONS

MODEL	UNIT	QB306	QB308	QB310	QB312	QB315
Jaw Stroke (Diameter)	in.	0.217	0.291	0.346	0.417	0.417
Plunger Stroke	in.	0.472	0.630	0.748	0.906	0.906
Max. Draw Bar Pull Force	lbs.	4941	7637	9659	12352	15928
Max. Gripping Force	lbs.	12802	18866	24932	32343	40381
Gripping Force at Max. Speed	lbs.	4267	6289	8311	11013	13460
Max. Speed	rpm	5500	4500	4000	3000	2300
Net Weight	lbs.	27.8	51.1	77.1	123.2	264.0
GD ²	lbs • ft. ²	5.5	16.4	30.1	70.7	-
Matching Cylinder		S1246	S1552	S1875	S2091	F2511H
Min. Gripping O.D.	in.	0.394	0.591	0.866	0.866	-
Max. Gripping O.D.	in.	5.512	7.087	8.268	9.843	-

GRIPPING CHARACTERISTIC GRAPH



Kitagawa's unique circular lock design assures positive alignment, engagement and peak accuracy.

Note: Specifications are subject to change without notice due to ongoing research and development

Model QB300 Series Chucks are manufactured from high grade alloy steel. All sliding surfaces are hardened and ground to assure consistent accuracy and performance.

Lubrication nipple in each base jaw.

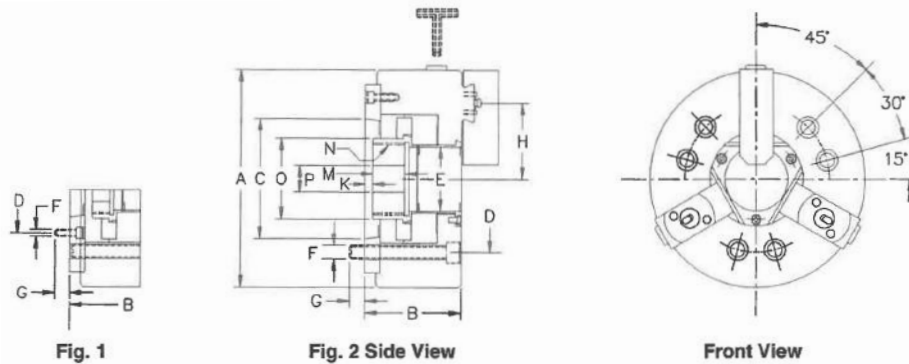
Mounting:

Direct mounting to fit ASA B5.9 type A (Interchangeable with DIN 55026).

Standard Equipment:

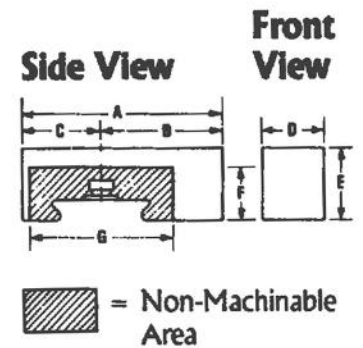
Chuck assembled with adapter, chucks mounting bolts, soft top jaws, T-nuts and jaw mounting bolts with wrench, draw nut wrench.

DIMENSIONAL DRAWINGS



QUICK JAW-CHANGE CHUCK DIMENSIONS (Dimensions in Inches)

MODEL	QB306A500	QB308A600	QB310A600	QB310A800	QB312A600	QB312A800	QB315
A	6.654	8.268	10.000	10.00	11.969	11.969	15.00
B	3.583	4.055	4.724	4.449	5.079	4.803	5.236
C	3.250	4.188	4.188	5.501	4.188	5.501	-
D	4.125	5.250	5.250	6.750	5.250	6.750	9.252
E	1.772	2.047	2.953	2.953	3.583	3.583	4.626
F	6xM10	6xM12	6xM12	6xM16	6xM12	6xM16	6xM20
G	0.630	0.709	0.728	0.945	0.728	0.984	-
H max.	2.303	2.835	3.465	3.465	4.185	4.185	5.354
H min.	2.195	2.689	3.291	3.291	3.976	3.976	5.146
K max.	1.024	1.240	1.319	1.043	1.299	1.024	0.433
K min.	0.551	0.610	0.571	0.295	0.394	0.118	-0.472
M	0.591	0.650	0.787	0.787	0.906	0.906	1.299
N max.	M55x2.0	M60x2.0	M85x2.0	M85x2.0	M100x2.0	M100x2.0	M130x2.0
O	2.362	2.598	3.701	3.701	4.252	4.252	5.472
P	0.787	1.181	1.772	1.772	1.969	1.969	2.362
Fig.	2	2	1	2	1	2	2



Draw nut is supplied without thread.

SOFT TOP JAW DIMENSIONS (Dimensions in Inches)

MODEL	6" SB06BB	6" SB06BB-40	8" SB08BB	8" SB08BB-56	10" SB10BB	10" SB10BB-60	12" SB12BB	12" SB12BB-70	15" SB15BB
A	3.543	3.543	4.173	4.173	4.921	4.921	5.472	5.472	6.693
B	2.126	2.126	2.520	2.520	2.992	2.992	3.543	3.543	4.331
C	1.417	1.417	1.654	1.654	1.929	1.929	1.929	1.929	2.362
D	1.260	1.260	1.457	1.457	1.654	1.654	1.969	1.969	1.969
E	1.181	1.575	1.496	2.205	1.654	2.362	1.969	2.756	2.362
F	0.945	0.945	1.102	1.102	1.220	1.220	1.339	1.339	1.575
G	2.677	2.677	2.992	2.992	3.465	3.465	3.622	3.622	4.331
Min. Gripping OD	0.394	0.394	0.591	0.591	0.866	0.866	1.181	1.181	-

A	B	C	D	E	F	SCREW SIZE	TAP SIZE	H	N	T

*Our standard dimension will be supplied unless otherwise stated

RETURN QUOTATION TO:

FIGURE _____

Name _____

Pointed**

Title _____

Quantity Required _____

Company _____

*Pointed Jaws will have 120° included angle unless otherwise stated.

Address _____

City _____ State _____ Zip _____

Phone _____

AMERICAN STANDARD
TONGUE & GROOVE

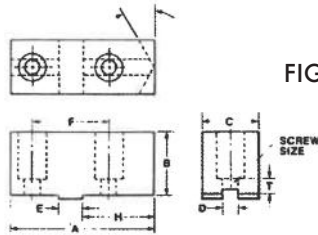
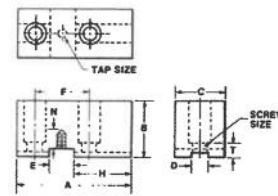


FIGURE A

FIGURE B



SQUARE SERRATED

ACME SERRATED

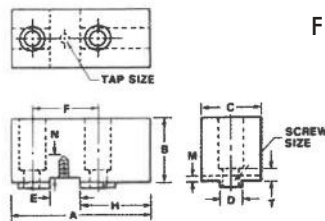
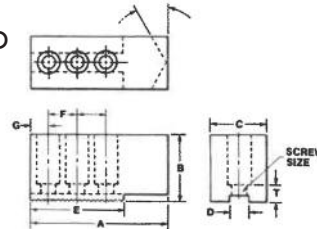


FIGURE C

FIGURE D



SERRATIONS ON JAW
ARE 1/16 PITCH X 90°

*SERRATIONS 3mm x 60°
E - LENGTH OF SERRATION
(.1181)

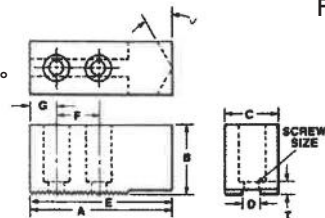
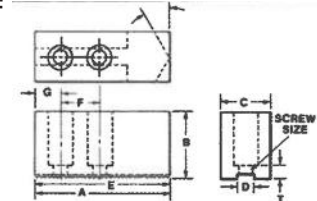


FIGURE E

FIGURE F



*SERRATIONS 1.5mm x 60°
E - LENGTH OF SERRATION
(.0591)

E- LENGTH OF SERRATION
SERRATED HARD JAW

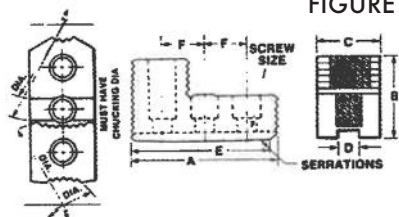
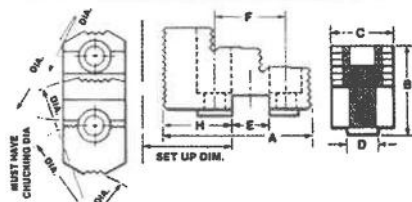


FIGURE G

FIGURE H



ACME SERRATED
HARD JAW

AMERICAN STANDARD
TONGUE & GROOVE
HARD JAW

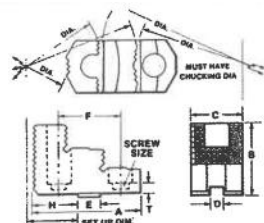
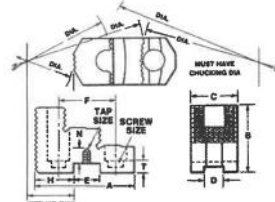


FIGURE J

FIGURE K



SQUARE SERRATED
HARD JAW