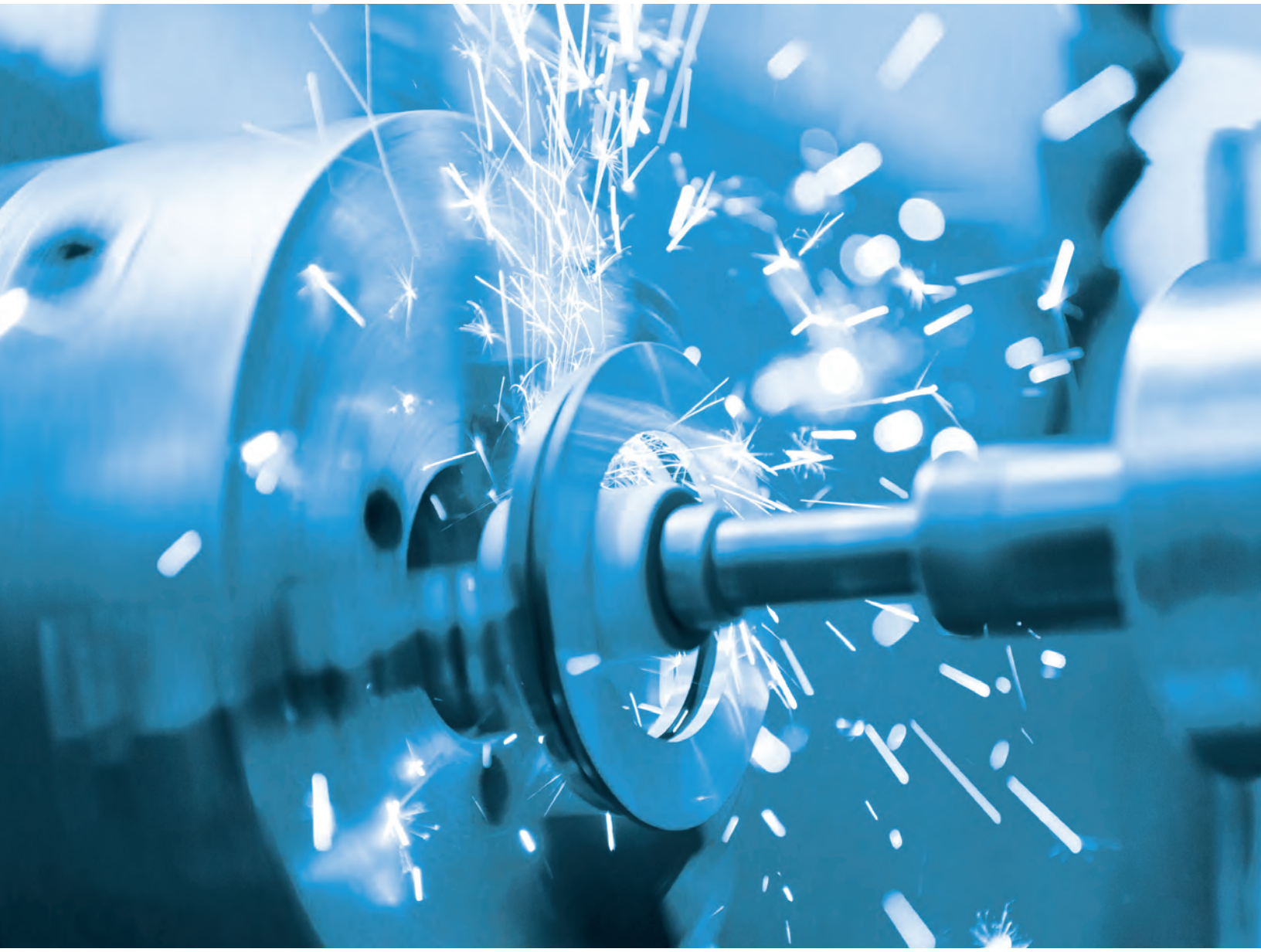
tmx™
EUROPEAN PRECISION & QUALITY

WORKHOLDING

Made in Europe



AHB
TOOLING & MACHINERY

Complete Metalworking Solutions

(800) 991-4225
www.ahbinc.com
ISO Certified
customerservice@ahbinc.com

- Manual Chucks
- Oil Country Chucks
- VTL Chucks
- Rotary Table Packages
- Power Chucks
- Centers & Rotating Bodies
- Vises

EUROPEAN PRECISION & QUALITY

Our time proven quality and reliability lies in our history of European craftsmanship and engineering. Toolmex's European factories are ISO 9001 certified and manufacture to international standards.

TMX Workholding products deliver the precision, accuracy and reliability associated with European manufacturing.

SELECTION GUIDE

MANUAL CHUCKS

OIL COUNTRY CHUCKS

VTL CHUCKS

TMX CHUCK PACKAGES FOR ROTARY TABLES, INDEXERS AND TRUNNIONS..... 29

POWER CHUCKS

CENTERS & ROTATING BODIES

MILLING MACHINE VISES

Manual Chuck Guide

Lathe Chuck Safety Conditions

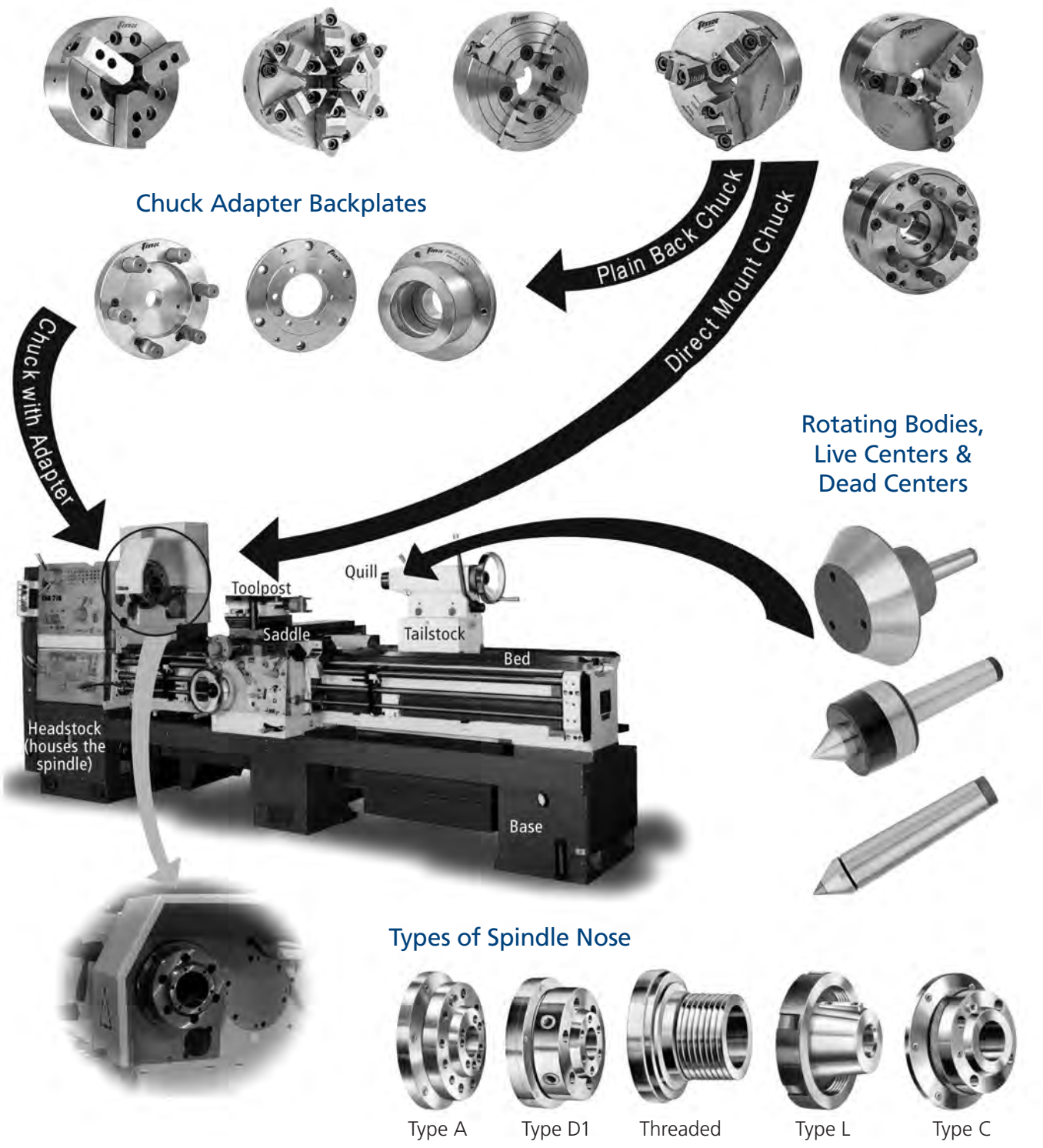
- Due to chuck rotating speeds and cutting forces during machining, care should be taken to ensure the proper and safe use of your TMX chuck
- Cleaning should be done often for safety purposes as well as to provide a long work life for your chuck
- Proper maintenance ensures longer life of the product

PRIOR TO OPERATING YOUR TMX LATHE CHUCK, PLEASE:

- Do not start the lathe until all is clear. A collision between the chuck and lathe will cause damage to both
- Do not use the chuck on heavy work where the chuck jaws project appreciably from the chuck body. Refer to the tables to select the correct size chuck for the application
- Do not clamp long work pieces in the chuck without additional support as this can cause heavy damage to the lathe and work environment. Refer to the table for safety parameters
- Always remove the chuck wrench before starting the machine
- Do not remove the safety spring from the chuck wrench
- Never operate the chuck if any parts are damaged, missing, or cracked
- Do not tamper with the chuck. If an inaccuracy is found, check the spindle nose or backplate for true-running and make sure there is no dirt or foreign matter between the mounting faces
- Never exceed maximum speed (RPM) of the chuck. The MAX RPM is stamped on the chuck face. Refer to the table for recommended maximum speeds for self-centering chucks
- Periodically inspect and service chucks for wear to avoid inadequate workholding conditions
- Be sure top jaws are securely bolted to the master jaws
- Never do any unauthorized chuck modifications
- Always keep your chuck clean and lubricated

CONTENTS

Application of Chucks & Centers



Manual Chuck Selection Worksheet

CHUCK PARAMETERS

proper identification of all chuck parameters will help us with recommendations and options

Maximum Weight of Workpiece (lbs)		Maximum Gripping Force	
Workpiece Diameter (max - min range)		Minimum Hole Diameter	
Workpiece Length		Maximum RPM	
Additional Workpiece Support		Machining Conditions	

CHUCK DIAMETER

in	2	3	4	5	6-1/4	8	10	12-1/2	15-3/4	20	25	32	36	40	49	Other (Specify)
mm	60	80	100	125	160	200	250	315	400	500	630	800	915	1000	1250	
✓																

TYPE OF CHUCK ✓

Self-Centering (scroll)	
SET-TRU (scroll)	
Independent	
5C Collet (manual)	
16C Collet (manual)	
Rotating with MT Shank	

NUMBER OF JAWS ✓

2	
3	
4	
6	

TYPE OF CHUCK JAWS ✓

2pc Reversible Hard Jaws	
Set of OD & Set of ID Hard Solid Jaws	
Hard Solid Reversible Jaws	
Soft Top Jaws & Hard Master Jaws	
Soft Solid Jaws	

TYPE OF MOUNTING – LATHE SPINDLE NOSE FOR CHUCKS AND BACKPLATES ✓

Plain Back	Short Taper A1 or A2		Short Taper D1	Short Taper C (DIN)	Long Taper L	Threaded Standard	Threaded Hardinge	5C	MT
	A1-4	A2-4	D1-3	–	L00	1" - 10	2-3/16" - 10"	–	MT3
	A1-5	A2-5	D1-4	4	L0	1-1/2" - 8	–	4"	MT4
	A1-6	A2-6	D1-5	5	L1	2-3/16" - 6	–	5"	MT5
	A1-8	A2-8	D1-6	6	L2	2-1/4" - 8	–	6"	–
	A1-11	A2-11	D1-8	8	L3	2-3/4" - 8	–	–	–
	A1-15	A2-15	D1-11	11	–	M39 x 4	–	–	–
	A1-20	A2-20	D1-15	–	–	–	–	–	–

ADDITIONAL NOTES:

Determining the Proper Spindle Type and Size

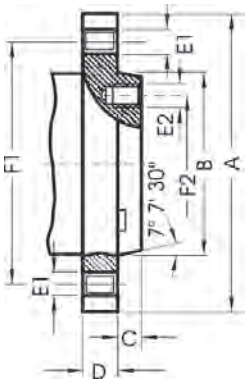
TMX Chucks meet all of the requirements of ASA Standard B5.9-1960

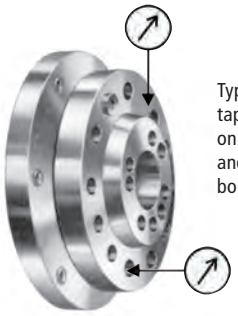
Selecting the chuck mounting from the following types:

- For short taper spindle nose, Type A, D, or C (DIN), measure the pilot diameter and length (dimensions B and C), bolt circle diameter (dimensions F1 and F2) and diameter of the holes (dimensions E1 and E2)
- In the case of A type mount, check the number of bolt circles (one for A2 mount or two for A1 mount)
- All chucks with A1 mount can be installed on A1 spindle nose only
- All chucks with A2 mount can be installed on either A1 or A2 spindle nose
- For the long taper spindle nose, Type L, check pilot diameter, length and thread size (dimensions A, C, and B)
- For the threaded spindle nose, check the thread diameter, number of threads per inch and length (dimensions B and D), plus overall length (dimension F1)

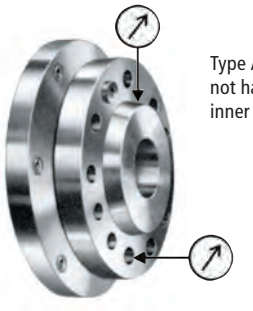
Spindle Type A1 and A2

Spindle Nose	F1	F2	B	C max	Thread E1 = E2 UNC-3B
A-4	3.2500	-	2.5005 + .0005	.4375	7/16-14
A-5	4.1250	2.4374	3.2505 +.0005	.5625	7/16-14
A-6	5.2500	3.2500	4.1880 + .0005	.6250	1/2-13
A-8	6.7500	4.37500	5.50075 + .0005	.6875	5/8-11
A-11	9.2500	6.5000	7.75075 + .0005	.7500	3/4-10
A-15	13.0000	9.7500	11.251 + .001	.8125	7/8-9
A-20	18.2500	14.5000	16.251 +.001	.8750	1-8
A-28	25.5000	20.8750	23.001 + .001	1.000	1 1/4-7





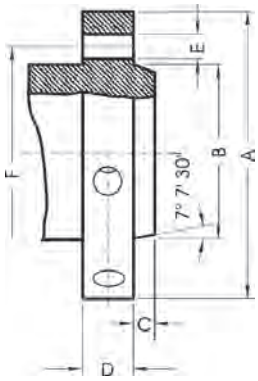
Type A1 has tapped holes on both inner and outer bolt circles

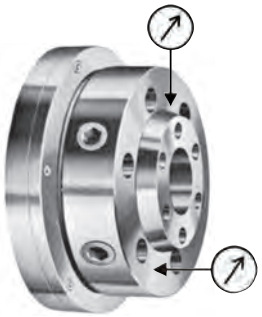


Type A2 does not have holes in the inner bolt circle

Camlock Spindle Type D1

Spindle Nose	A	F	B	C max	E	# of Holes	Camlock Stud Dia
D1-3	3.622	2.7820	2.1250 + .00025	.4375	.5937	3	9/16
D1-4	4.606	3.2500	2.5005 + .0005	.4375	.6562		5/8
D1-5	5.748	4.1250	3.2505 + .0005	.5000	.8750	6	3/4
D1-6	7.126	5.2500	4.1880 + .0005	.5625	1.000		7/8
D1-8	8.858	6.7500	5.50075 +.0005	.6250	1.125		1
D1-11	11.732	9.2520	7.75075 +.0005	.6875	1.250		1 3/16
D1-15	15.866	13.0000	11.251 + .001	.7500	1.375		1 3/8

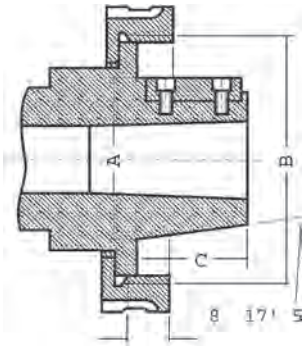




Determining the Proper Spindle Type and Size

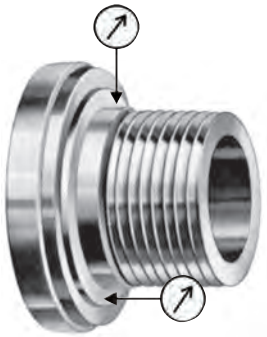
Long Taper Key Drive, Spindle Type L

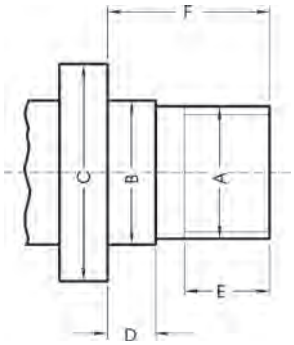
Spindle Nose	Thread B	C	A	Key
L00	3 3/4" - 6"	2	2.750	3/8 x 3/8 x 1 1/2
L0	4 1/2" - 6"	2 3/8	3.250	3/8 x 3/8 x 1 3/4
L1	6" - 6"	2 7/8	4.125	5/8 x 5/8 x 2 3/8
L2	7 3/4" - 5"	3 3/8	5.250	3/4 x 3/4 x 2 7/8
L3	10 3/8" - 4"	3 7/8	6.500	1 x 1 x 3 1/4



Threaded Spindle

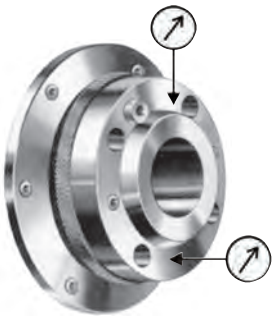
Spindle Nose A	B	F	D	E
1" - 10" UNS-2B	1.015	1.500	.4375	1.000
1 1/2"-8" UN-2B	1.515	1.500	.4375	1.000
2 3/16" - 10" UN-2B	2.2025	1.750	.5625	1.125
2 1/4" - 8" UN-2B	2.260	1.750	.5625	1.125
2 3/16" - 6" UN-2B	2.2025	1.750	.5625	1.125
2 3/4" - 8" UN-2B	2.760	2.0625	.6875	1.3125

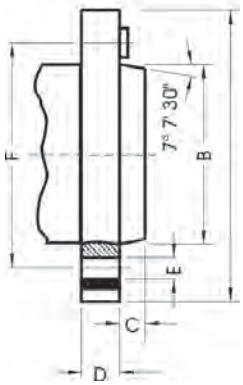




German Standard DIN 55027, Spindle Type C

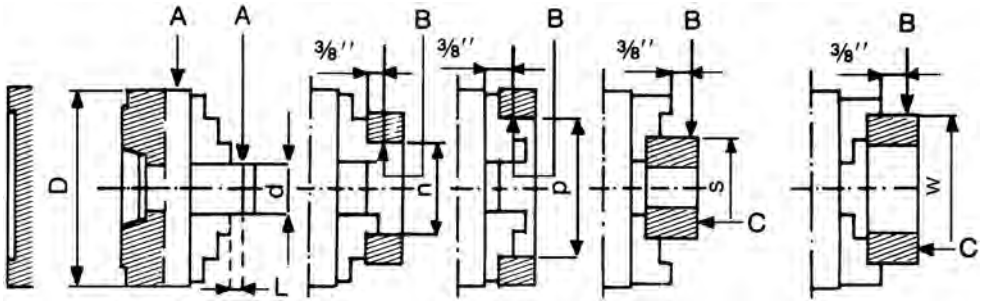
Spindle Nose	F	B	C max	E	# of Holes
C-4	3.2500	2.5005	.4331	.83	3
C-5	4.1250	3.2505	.5118	.83	4
C-6	5.2500	4.1880	.5512	.91	4
C-8	6.7500	5.50075	.6299	1.14	4
C-11	9.2520	7.75075	.7087	1.42	6





Self-Centering Scroll Chuck Accuracy

- All allowable runouts which are specified relate to measurements at three different jaw openings **d** (1, 2, and 3)



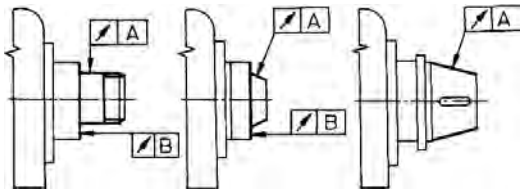
Chuck Dia D	d			L	n	p	s	with solid jaws	with 2-piece jaws	Radial Runout		Axial Runout C
	1	2	3							A	B	
3-1/2"	0.39	–	0.55	1.57	1.57	2.36	1.38	2.48	–	0.0008	0.001	0.0006
4"	0.39	0.55	0.71	1.57	1.57	2.95	1.97	3.15	–	0.0008	0.001	0.0006
5"	0.71	0.98	1.18	2.36	1.97	3.94	2.44	3.94	4.72	0.0012	0.0014	0.0008
6-1/4"	0.71	1.18	1.57	2.36	1.97	5.31	3.46	3.94	5.9	0.0012	0.0014	0.0008
8"	1.18	1.57	2.08	3.15	3.15	6.38	3.78	6.3	7.28	0.0016	0.0018	0.001
10"	1.18	2.08	2.95	3.15	3.15	7.87	5.9	6.3	8.86	0.0016	0.0018	0.001
12-1/2"	2.08	2.95	3.94	4.72	4.92	9.92	8.27	9.84	11.81	0.002	0.0022	0.0012
15-3/4"	2.08	3.94	4.92	4.72	4.92	11.1	9.84	9.84	13.78	0.0024	0.0025	0.0012
20"	2.95	3.94	4.92	6.3	7.87	11.1	11.81	15.75	15.75	0.004	0.004	0.002
25"	2.95	4.92	6.3	6.3	7.87	12.79	15.75	15.75	15.75	0.004	0.004	0.002
31-1/2"	6.3	7.87	9.84	6.3	12.8	19.7	15.75	19.7	19.7	0.0059	0.0059	0.0024

Permissible Spindle Runout

To obtain the specified clamping accuracy of a chuck mounted on a machine tool, it is necessary to:

1. Reduce play in the spindle bearings to allowable minimum
2. Ensure the machine spindle nose does not exceed the values specified
3. Meet the basic requirements for correct mounting of the chuck on the spindle nose
4. Follow the chuck manual

Chuck Dia	Spindle Runout
3" - 16"	.00012" max
20" - 25"	.0002" max

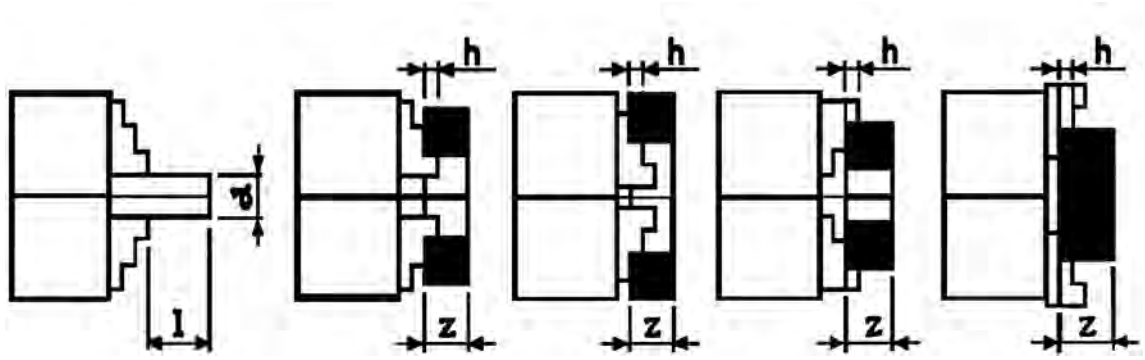


Safe Operating Parameters

Conditions:

- l and z = maximum length of workpiece
- d = workpiece diameter
- h = height of the clamping jaw step
- Workpiece is clamped into the chuck jaws without additional support

Chuck Diameter	3-1/4"	4"	5"	6-1/4"	8"	10"	12-1/2"	15-3/4"	20"	25"	31-1/2"
l	1.2 × d						1.5 × d			1 × d	
z	4 × h										



Total Gripping Force of all Scroll Chucks – lbs

Chuck Diameter	3-1/4"	4"	5"	6-1/4"	8"	10"	12-1/2"	15-3/4"	20"	25"	31-1/2"
Max Pinion Torque Nm	35	50	75	120	160	180	200	280	360	460	500

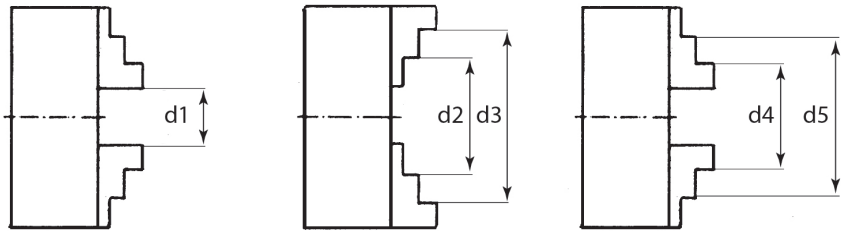
Recommended Maximum Speeds for Scroll Chucks

Chuck Diameter	3-1/4"	4"	5"	6-1/4"	8"	10"	12-1/2"	15-3/4"	20"	25"	31-1/2"
Max RPM	6000	5200	4800	4500	4000	3500	2800	2000	1200	1000	760

Value of Unbalancing for Scroll Chucks

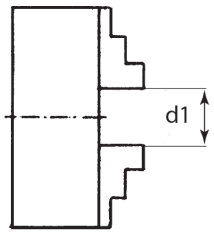
Chuck Diameter	3-1/4"	4"	5"	6-1/4"	8"	10"	12-1/2"	15-3/4"	20"	25"
Unbalancing (ounce-inch)	0.15	0.22	0.32	0.44	0.62	0.87	1.25	1.94	4.16	8.88

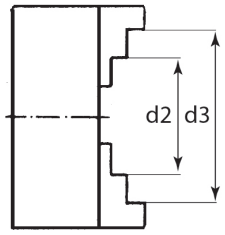
Clamping Ranges for 2, 3 and 4-Jaw Scroll Chucks

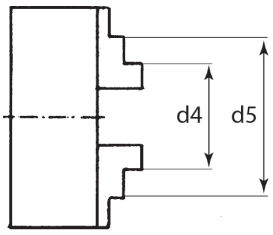


Chuck Dia		2-1/3"	3-1/4"	4"	5"	6-1/4"	8"	10"	12-1/2"	15-3/4"	20"	25"	31-1/2"
Solid Jaws	d1	.02-.95	.08-1.06	.118 - 1.30	.118 - 1.97	.118 - 2.52	.157 - 3.54	.197 - 4.65	.394 - 5.16	.39-7.09	.79-9.25	1.18-13.19	5.9-18.98
	d2	.79-1.65	.87-1.81	1.26 - 2.44	1.54 - 3.27	1.97 - 4.21	2.36 - 5.71	3.03 - 7.40	3.54 - 8.46	3.35-9.92	4.72-13.19	6.30-18.31	11.10-24.17
	d3	1.46-2.36	1.77-2.72	2.44 - 3.27	3.15 - 4.92	3.86 - 6.30	5.12 - 7.87	6.30 - 9.84	7.48 - 12.40	8.27-14.96	9.65-18.74	12.80-24.80	17.64-30.71
	d4	.79-1.65	.98-1.97	.98 - 2.20	1.34 - 2.91	1.65 - 3.94	2.05 - 5.31	2.44 - 6.85	3.07 - 7.87	4.05-10.71	5.51-14.06	7.09-19.17	11.89-24.96
	d5	1.50-2.36	1.89-2.80	2.20 - 3.43	2.83 - 4.53	3.70 - 6.06	4.72 - 7.95	5.71 - 10.08	6.77 - 11.77	9.05-15.75	10.87-19.69	13.58-24.80	18.43-31.50
Two-Piece Jaws	d1	–	–	–	.118 - 1.97	.118 - 2.52	.157 - 3.54	.197 - 4.65	.394 - 5.16	.394 - 7.09	.787 - 9.25	1.18 - 13.19	5.9-18.98
	d2	–	–	–	2.05 - 3.78	2.44 - 4.76	2.83 - 6.14	3.39 - 7.76	4.06 - 8.90	5.00 - 11.57	4.33 - 15.75	4.72 - 22.44	9.92-28.99
	d3	–	–	–	3.74 - 4.92	4.53 - 6.30	5.24 - 7.87	6.30 - 9.84	7.48 - 12.40	9.06 -15.75	7.48 - 19.69	7.87 - 24.80	12.91-31.97
	d4	–	–	–	1.34 - 2.99	1.65 - 3.81	1.97 - 5.12	2.28 - 6.50	2.56 - 7.17	2.84 - 8.98	4.72 - 16.14	5.51 - 23.23	9.45-28.5
	d5	–	–	–	2.95 - 4.65	3.46 - 5.75	4.13 - 7.48	4.92 - 9.25	5.71 - 10.43	6.50 - 12.95	7.87 - 19.09	8.27 - 26.18	12.44-31.50

Clamping Ranges for 6-Jaw Set-Tru Scroll Chucks



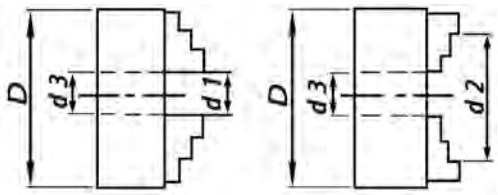




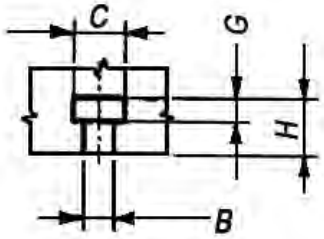
Chuck Dia		4"	5"	6-1/4"	8"	10"	12-1/2"	15-3/4"	20"	25"
Solid Jaws	d1	.118 - 1.299	.236 - 1.69	.315 - 2.51	.315 - 3.54	.47 - 4.65	.47 - 5.16	–	–	–
	d2	1.259 - 2.440	1.65 - 3.07	2.05 - 4.21	2.52 - 5.71	3.23 - 7.40	3.74 - 8.46	–	–	–
	d3	2.440 - 3.661	3.27 - 4.72	4.02 - 6.30	5.20 - 7.87	6.50 - 9.84	7.56 - 12.40	–	–	–
	d4	1.023 - 2.204	1.34 - 2.68	1.85 - 3.94	2.17 - 5.31	2.68 - 6.85	3.23 - 7.87	–	–	–
	d5	2.244 - 3.425	2.91 - 4.33	3.86 - 6.06	4.76 - 7.95	5.91 - 10.08	7.01 - 11.77	–	–	–
Two-Piece Jaws	d1	–	.236 - 1.69	.315 - 2.51	.315 - 3.54	.47 - 4.65	.47 - 5.16	.59 - 7.95	1.18 - 9.25	1.57 - 13.19
	d2	–	1.97 - 3.43	2.64 - 4.76	2.91 - 6.14	3.23 - 7.40	4.25 - 8.90	5.20 - 11.65	4.76 - 15.83	5.20 - 21.85
	d3	–	3.70 - 4.92	4.65 - 6.30	5.28 - 7.78	6.46 - 9.84	6.02 - 12.40	9.29 - 15.75	7.76 - 18.82	8.27 - 24.80
	d4	–	1.30 - 2.75	1.77 - 3.82	2.05 - 5.12	2.68 - 6.85	2.68 - 7.17	2.87 - 9.92	5.31 - 16.26	5.91 - 23.03
	d5	–	2.30 - 4.68	3.62 - 5.75	4.29 - 7.48	5.91 - 10.08	5.91 - 10.08	6.65 - 13.86	8.27 - 19.25	8.66 - 26.02

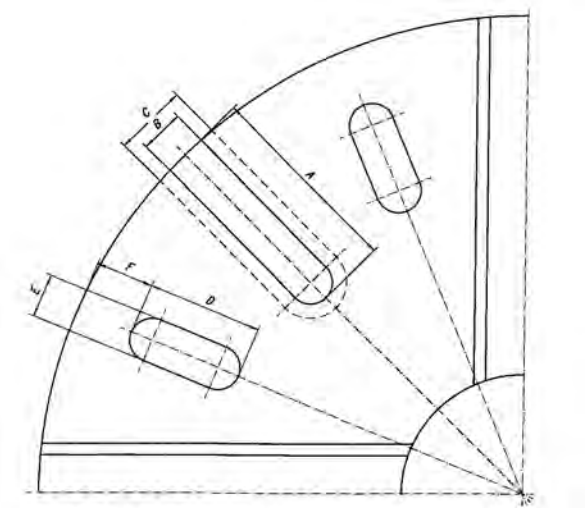
Clamping Ranges for 4-Jaw Independent Chucks

Chuck Dia D	d1 min	d2 max	Chuck Thru Hole d3
3-1/2"	0.118	3.346	0.984
5"	0.315	4.9213	1.0236
6-1/4"	0.315	6.2992	1.6535
8"	0.394	7.874	1.772
10"	0.394	9.843	2.362
12-1/2"	0.59	12.402	2.953
15-3/4"	0.787	15.748	3.74
20"	1.772	19.685	4.724
25"	1.969	24.803	6.102
31-1/2"	1.969	31.496	7.677
36"	4.724	36.024	7.48
39-3/8"	6.693	39.37	
49"	6.693	49.213	



T-Slot Dimensions for 4-Jaw Independent Chucks





Chuck Dia	A	B	C	D	E	F	G	H	Number of T-slots B	Number of Slots E
10"	1.969	.551	.925	–	–	–	.394	.945	4	–
12-1/2"	2.657	.709	1.260	–	–	–	.492	1.181		–
15-3/4"	3.543			–	–	–				–
20"	4.134	.886	1.476	2.362	.906	1.181	.630	1.378		8
25"	4.528			3.937						
31-1/2"	5.315			4.331	1.063	1.969				
36"	8.661	1.102	1.811	3.937	1.102	3.839	.787	1.969		
39-3/8"	9.843					4.724				
49"	12.598			5.118		5.906				

Manual Lathe Chucks

ENGINEERED & MANUFACTURED IN EUROPE

TMX Chucks can handle rough as well as precision machining demands while extending the life of cutting tools and machine spindles due to the increased rigidity, accuracy and optimal wear behavior

- 2 Year Quality and Performance Warranty
- ISO Certified
- All chuck mounting sizes meet DIN standards
- Guaranteed to maintain exceptional accuracy for an extended period

Bodies

- Chuck bodies are drop forged and hardened to 28 HRc
- 28 HRc is hard enough to wear longer but not brittle which eliminates stress cracks in critical areas

Jaws

- 2-Piece Hard Reversible American Standard Tongue and Groove Jaws are made of high quality alloy steel then hardened to 50 HRc and ground
- Jaws hardened to 50 HRc
- Jaw teeth are “softer” than the rest of the jaw to allow for a slight flex which will extend the life of the master jaw
- Solid and soft top jaws also available

Adapter Plates

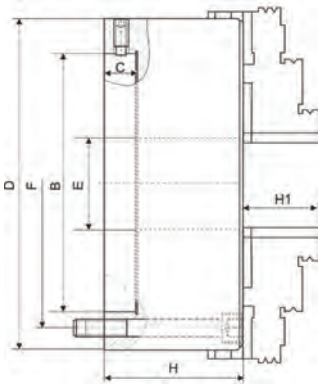
- Adapters are made of steel and not heat treated delivering optimum functionality and performance
- Fully-finished to precisely fit TMX plain back chucks without a need for any additional machining
- See www.tmxtools.com for the full offering of A, D, L, C and threaded taper plates

CONTENTS

Set-Tru Scroll Chucks

3, 4 & 6-Jaw – 0.0006" T.I.R. Repeatability with Fine Adjustment

- Forged Steel Body
- Fine adjustment with 4 micro adjustment screws for outstanding repeatability
- 16", 20" and 25" diameter chucks with 3-Jaws and 6-Jaws use 8 micro adjustment screws achieving extremely high gripping concentricity
- 2-Piece Hard Reversible American Standard Tongue and Groove Jaws
- Compatible with Rotary Table Packages (see page 19)



Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Chuck Wrench
- 1 Set of Fine Adjustment Screws
- 1 Set of Mounting Bolts
- Eyebolts for chucks 16" and larger

# of Jaws	Diameter D (in)	Item Number	Hole Dia E (in)	Max RPMs	Gripping Force (daN)	Weight (lbs)	Recess Dia B (in)	Recess Depth C (in)	Bolt Circle F (in)	Body Height H (in)	Jaw Jeight H1 (in)
3	5	3-866-0500P	1.378	5500	2400	15.1	2.165	0.591	4.252	2.835	1.575
	6	3-866-0600P	1.654	4600	3100	29.3	3.386	0.709	5.512	3.484	1.732
	8	3-866-0800P	2.165	4000	3700	49.6	4.331	0.787	6.929	3.898	1.772
	10	3-866-1000P	2.992	3500	4600	80.9	5.709	0.787	8.819	4.291	2.051
	12	3-866-1200P	4.055	2800	5500	137.8	7.087	0.787	11.260	4.665	2.244
	16	3-866-1600P	5.354	2000	6500	222.2	11.781	0.866	6.752	5.118	2.638
	20	3-866-2000P	7.480	1300	7200	395.6	16.030	1.181	9.252	6.299	3.150
	25	3-866-2500P	9.921	1000	8000	715.6	16.030	1.181	13.000	6.890	3.425
4	6	3-847-0600P	1.654	4600	3100	29.3	3.386	0.709	5.512	3.484	1.732
	8	3-847-0800P	2.165	4000	3700	49.6	4.331	0.787	6.929	3.898	1.772
	10	3-847-1000P	2.992	3500	4600	80.9	5.709	0.787	8.819	4.291	2.051
	12	3-847-1200P	4.055	2800	5500	137.8	7.087	0.787	11.260	4.665	2.244
	16	3-847-1600P	5.354	2000	6500	222.2	11.781	0.866	6.752	5.118	2.638
6	5	3-868-0500P	1.378	3800	2400	15.1	2.165	0.591	4.252	2.835	1.575
	6	3-868-0600P	1.654	3200	3100	29.3	3.386	0.709	5.512	3.484	1.732
	8	3-868-0800P	2.165	2800	3700	49.6	4.331	0.787	6.929	3.898	1.772
	10	3-868-1000P	2.992	2400	4600	80.9	5.709	0.787	8.819	4.291	2.051
	12	3-868-1200P	4.055	1900	5500	137.8	7.087	0.787	11.260	4.665	2.244
	16	3-868-1600P	5.354	1400	6500	222.2	11.781	0.866	6.752	5.118	2.638
	20	3-868-2000P	7.480	900	7200	395.6	16.030	1.181	9.252	6.299	3.150
	25	3-868-2500P	9.921	700	8000	715.6	16.030	1.181	13.000	6.890	3.425

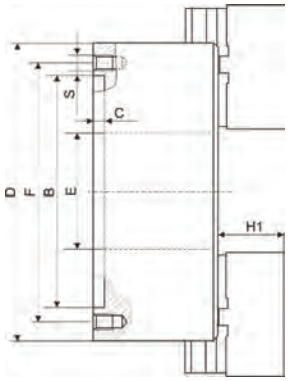
Scroll Chucks

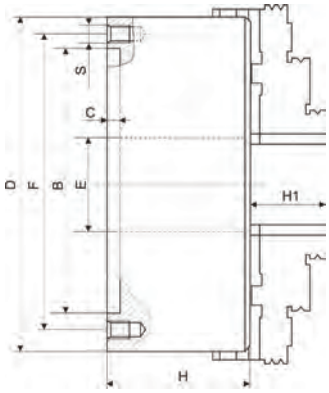
2, 3 & 4-Jaw – Self-Centering

- Forged Steel Body
- Each scroll chuck is statically balanced to ultra-high tolerance levels before assembly for longer life and higher accuracy
- All bearing surfaces are carefully machined at high tolerances and hardened to increase precision
- 3 and 4-Jaw Chucks come standard with 2-Piece Hard Reversible American Standard Tongue and Groove Jaws
- 2-Jaw Chucks come standard with 2-Piece Hard Master and Soft Top Jaws

3-831 Series

3-820 & 3-841 Series





Each Chuck Provided With

- 3 & 4-Jaw Chucks
  - 1 Set of Hard Master Jaws
  - 1 Set of Reversible Hard Top Jaws
- 2-Jaw Chucks
  - 1 Set of Hard Master Jaws
  - 1 Set of Soft Top Jaws
- 1 Chuck Wrench
- 1 Set of Mounting Bolts
- Eyebolts for Chucks 16" and Larger

# of Jaws	Jaw Type	Diameter D (in)	Item Number	Hole Dia E (in)	Max RPMs	Gripping Force (daN)	Weight (lbs)	Recess Dia B (in)	Recess Depth C (in)	Bolt Circle F (in)	Body Height H (in)	Jaw Height H1 (in)	Hole Thread Size S
2	2 Pc with Soft Top Jaws	6	3-831-0600P	1.6535	4600	2400	22.2	4.9213	0.1575	5.5118	2.5394	1.6929	6xM10
		8	3-831-0800P	2.1654	4000	2900	38.9	6.2992	0.1575	6.9291	2.9528	1.7717	6xM10
		10	3-831-1000P	2.9921	3500	3600	64.4	7.874	0.1969	8.8189	3.3465	2.0866	6xM12
		12	3-831-1200P	4.0551	2800	4400	111.1	10.2362	0.1969	11.2598	3.7008	2.2441	6xM16
		16	3-831-1600P	5.3543	2000	4900	188.9	12.9921	0.1969	14.252	4.1339	2.6378	6xM16
3	2 Pc with Hard Top Jaws	5	3-820-0500P	1.2598	5500	2400	11	3.7402	0.1575	4.252	2.2047	1.5748	3xM8
		6	3-820-0600P	1.6535	4600	3100	22.2	4.9213	0.1575	5.5118	2.5394	1.5748	6xM10
		8	3-820-0800P	2.1654	4000	3700	38.9	6.2992	0.1575	6.9291	2.9528	1.5748	6xM10
		10	3-820-1000P	2.9921	3500	4600	64.4	7.874	0.1969	8.8189	3.3465	1.5748	6xM12
		12	3-820-1200P	4.0551	2800	5500	111.1	10.2362	0.1969	11.2598	3.7008	1.5748	6xM16
		16	3-820-1600P	5.3543	2000	6500	188.9	12.9921	0.1969	14.252	4.1339	1.5748	6xM16
		20	3-820-2000P	7.4803	1300	7200	322.2	16.5354	0.1969	18.0315	4.7244	1.5748	6xM16
		25	3-820-2500P	9.9213	1000	8000	555.6	21.4567	0.2756	23.0709	5.315	1.5748	6xM16
		32	3-820-3200P	10.5512	764	13000	902	28.7402	0.2756	29.9213	6.1024	3.6614	6xM20
		40	3-820-4000P	15.3543	610	12000	1600	35.8267	0.2756	37.4016	6.496	3.6614	6xM24
4	2 Pc with Hard Top Jaws	5	3-841-0500P	1.2598	5500	2400	11.1	3.7402	0.1575	4.252	2.2047	1.5748	3xM8
		6	3-841-0600P	1.6535	4600	3100	22.2	4.9213	0.1575	5.5118	2.5394	1.7323	6xM10
		8	3-841-0800P	2.1654	4000	3700	38.9	6.2992	0.1575	6.9291	2.9528	1.7717	6xM10
		10	3-841-1000P	2.9921	3500	4600	64.4	7.874	0.1969	8.8189	3.3465	2.0512	6xM12
		12	3-841-1200P	4.0551	2800	5500	111.1	10.2362	0.1969	11.2598	3.7008	2.2441	6xM16
		16	3-841-1600P	5.3543	2000	6500	188.9	12.9921	0.1969	14.252	4.1339	2.6378	6xM16
		20	3-841-2000P	7.4803	1300	7200	322.2	16.5354	0.1969	18.0315	4.7244	3.1496	6xM16

Front & Back Mount Scroll Chucks

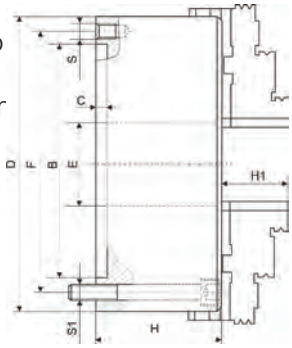
3 & 4-Jaw – Self-Centering

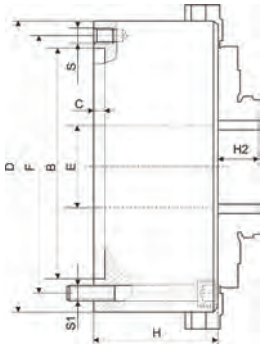
- Forged Steel Body
- Can be mounted directly on 3/6 slot rotary tables or on a base plate when the rotary table has 3/6 or 4/8 T-slots
- Compatible with Rotary Table Packages (see page 19)
- Base plates are designed for use with all rotary tables and other devices where back mounting chucks cannot be used
- These chucks can also be mounted to a rough machined backplate, but will require machining of bolt hole patterr and projections for finished assembly

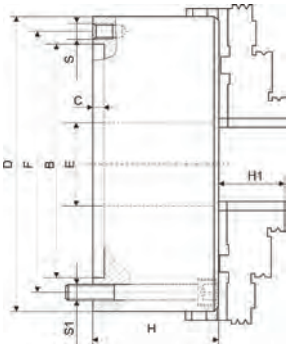
3-813 Series
2pc Jaws

3-813 Series
Solid Jaws

3-814 Series
2pc Jaws







Each Chuck Provided With

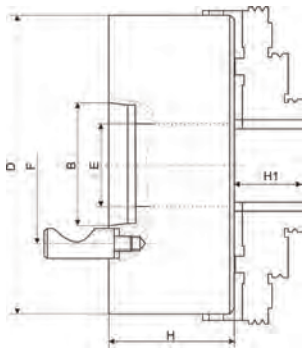
- 2-Piece Jaw Chucks
  - 1 Set of Reversible Hard Master Jaws
  - 1 Set of Revesible Hard Top Jaws
- Solid Jaw Chucks
  - 1 Set Each Solid ID and OD Jaws
- 1 Chuck Wrench
- 1 Set of Mounting Bolts
- Eyebolts for chucks 16" and larger

# of Jaws	Jaw Type	Diameter D (in)	Item Number	Hole Dia E (in)	Max RPMs	Gripping Force (daN)	Weight (lb)	Recess Dia B (in)	Recess Depth C (in)	Bolt Circle F (in)	Body Height H (in)	Jaw Height H1/H2 (in)	Hole Thread Size S	Bolt Thread Size S1
3	Solid	3	3-813-0301P	0.630	7000	1000	3.3	2.205	0.118	2.638	1.732	0.512	3xM6	3xM6
		4	3-813-0401P	0.787	6300	1700	6.2	2.756	0.118	3.268	1.969	0.669	3xM8	3xM8
		5	3-813-0501P	1.260	5500	2400	11.1	3.740	0.158	4.252	2.205	0.787	3xM8	3xM8
		6	3-813-0601P	1.654	4600	3100	22.2	4.921	0.158	5.512	2.539	1.299	3xM10	3xM10
		8	3-813-0801P	2.165	4000	3700	38.9	6.299	0.158	6.929	2.953	1.142	3xM10	3xM10
		10	3-813-1001P	2.992	3500	4600	64.4	7.874	0.197	8.819	3.347	1.339	3xM12	3xM12
		12	3-813-1201P	4.055	2800	5500	111.1	10.236	0.197	11.260	3.701	2.244	6xM16	3xM16
3	2pc	5	3-813-0500P	1.260	5500	2400	11.1	3.740	0.158	4.252	2.205	1.575	3xM8	3xM8
		6	3-813-0600P	1.654	4600	3100	22.2	4.921	0.158	5.512	2.539	1.732	6xM10	3xM10
		8	3-813-0800P	2.165	4000	3700	38.9	6.299	0.158	6.929	2.953	1.772	6xM10	3xM10
		10	3-813-1000P	2.992	3500	4600	64.4	7.874	0.197	8.819	3.347	2.051	6xM12	3xM12
		12	3-813-1200P	4.055	2800	5500	111.1	10.236	0.197	11.260	3.701	2.244	6xM16	3xM16
		16	3-813-1600P	5.354	2000	6500	188.9	12.992	0.197	14.252	4.134	2.638	6xM16	3xM16
		20	3-813-2000P	7.480	1300	7200	322.2	16.535	0.197	18.032	4.724	3.150	6xM16	6xM16
		25	3-813-2500P	9.921	1000	8000	555.6	21.457	0.276	23.071	5.315	3.425	6xM16	6xM16
4	2pc	6	3-814-0600P	1.654	4600	3100	22.2	4.921	0.158	5.512	2.539	1.732	6xM10	3xM10
		8	3-814-0800P	2.165	4000	3700	38.9	6.299	0.158	6.929	2.953	1.772	6xM10	3xM10
		10	3-814-1000P	2.992	3500	4600	64.4	7.874	0.197	8.819	3.347	2.051	6xM12	3xM12
		12	3-814-1200P	4.055	2800	5500	111.1	10.236	0.197	11.260	3.701	2.244	6xM16	3xM16
		16	3-814-1600P	5.354	2000	6500	188.9	12.992	0.197	14.252	4.134	2.638	6xM16	3xM16
		20	3-814-2000P	7.480	1300	7200	322.2	16.535	0.197	18.032	4.724	3.150	6xM16	6xM16

Type D1 Direct Mount Scroll Chucks

3-Jaw – No Need for Machining - No Adapter Plate Required

- Forged Steel Body
- Comes standard with 2-Piece Hard Reversible American Standard Tongue and Groove Jaws



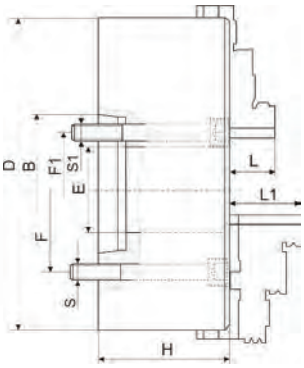
Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Chuck Wrench
- 1 Set of Camlock Studs
- 1 Set of Camlock Set Screws
- Eyebolts for chucks 16" and larger

Diameter D (in)	Taper Size	Item Number	Hole Dia E (in)	Max RPMs	Gripping Force (daN)	Weight (lbs)	Recess Dia B (in)	Stud Circle Dia F (in)	Body Height H (in)	Jaw Height H1 (in)	Camlock Studs		
											Qty	Dia (in)	Thread
8	D1-4	3-823-0834P	2.1654	4000	3700	49.8	2.5005	3.252	3.878	1.772	3	5/8	M10x1
8	D1-6	3-823-0836P	2.1654	4000	3700	52	4.188	5.252	4.252	1.772	6	7/8	M16x1.5
10	D1-6	3-823-1036P	2.9921	3500	4600	86	4.188	5.252	4.6063	2.051	6	7/8	M16x1.5
10	D1-8	3-823-1038P	2.9921	3500	4600	87.6	5.5007	6.748	4.7047	2.051	6	1	M20x1.5
12	D1-6	3-823-1236P	4.0551	2800	5500	153.1	4.188	5.252	5.0591	2.244	6	7/8	M16x1.5
12	D1-8	3-823-1238P	4.1732	2800	5500	149.8	5.5007	6.748	5.0591	2.244	6	1	M20x1.5
12	D1-11	3-823-1239P	4.0551	2800	5500	150.7	7.7507	9.252	5.374	2.244	6	1-3/16	M22x1.5
16	D1-8	3-823-1638P	5.3543	2000	6500	260.9	5.5007	6.748	5.4921	2.638	6	1	M20x1.5
16	D1-11	3-823-1639P	5.3543	2000	6500	260.9	7.7509	9.252	5.8071	2.638	6	1-3/16	M22x1.5
20	D1-8	3-823-2038P	5.3543	1300	7200	433.3	5.5007	6.748	6.0827	3.150	6	1	M20x1.5
20	D1-11	3-823-2039P	7.4803	1300	7200	424.4	7.7509	9.252	6.3976	3.150	6	1-3/16	M22x1.5
25	D1-11	3-823-2539P	7.4803	1000	8000	747.8	7.7509	9.252	6.9291	3.425	6	1-3/16	M22x1.5

Type A2 Direct Mount Scroll Chucks

3-Jaw – No Need for Machining - No Adapter Plate Required



- Forged Steel Body
- Comes standard with 2-Piece Hard Reversible American Standard Tongue and Groove Jaws

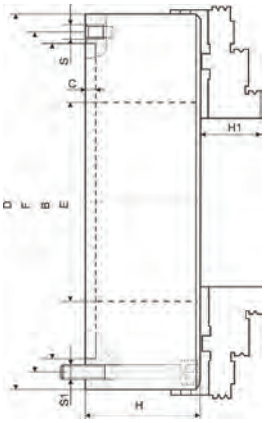
Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Set of Mounting Bolts
- 1 Chuck Wrench
- Eyebolts for chucks 16" and larger

Diameter D (in)	Mount	Item Number	Hole Dia E (in)	Max RPMs	Weight (lbs)	Recess Dia B (in)	Bolt Circle Dia F (in)	Bolt Circle Dia F1 (in)	Body Height H (in)	Jaw Height L1 (in)	Hole Thread S (in)	Hole Thread S1 (in)
16	A2-8	3-821-1628P	5.354	2000	246	4.188	6.748	—	5.374	2.638	6xM16	—
16	A2-11	3-821-1629P	5.354	2000	246	7.75	6.5	—	5.374	2.638	6xM20	—
20	A2-8	3-821-2028P	5.354	1300	414	5.501	6.748	—	5.965	3.15	6XM16	—
20	A2-11	3-821-2029P	7.48	1300	414	7.751	9.252	—	5.965	3.15	6xM20	—
20	A2-15	3-821-2030P	—	1300	414	—	—	—	5.965	3.15	6xM20	—
25	A2-11	3-821-2529P	9.921	1000	726	7.751	9.252	—	6.732	3.425	6XM20	—
25	A2-15	3-821-2530P	7.48	1000	726	11.251	13.000	—	6.732	3.425	6xM24	—
32	A2-11	3-821-3211P	10.7	765	900	28.74	29.921	—	6.102	3.661	6xM20	—
32	A2-15	3-821-3215P	10.7	765	900	28.74	29.921	—	6.102	3.661	6xM20	—
40	A2-15	3-821-4015P	15.35	610	1600	35.827	37.402	—	6.496	3.661	6xM24	—

Extra Large Thru-Hole Scroll Chucks

3-Jaw – Self-Centering



- Forged Steel Body
- Designed for pipe machining or pipe welding cut-off operations
- Front and Back Mount - Can be used on lathes, rotary tables and welding devices

Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Set of Soft Long Jaws
- 1 Chuck Wrench

Diameter D (in)	Item Number	Hole Dia E (in)	Max RPMs	Gripping Force (daN)	Weight (lbs)	Recess Dia B (in)	Recess Depth C (in)	Bolt Circle Dia F (in)	Body Height H (in)	Jaw Height H1 (in)	Hole Thread Size S	Bolt Thread Size S1
12	3-819-1200P	5.708	1400	5500	103	10.236	0.1968	11.26	3.819	2.244	3xM16	3xM16
16	3-819-1600P	8.66	1000	6500	143	14.252	0.2362	15	4.134	2.638	6xM12	6xM12
20	3-819-2000P	12.60	800	7200	264	18.189	0.315	18.957	4.488	3.150	6xM16	6xM16
26	3-819-2600P	15.984	600	7700	508	22.835	0.276	24.409	5.315	3.425	6xM16	6xM16

Independent Chucks

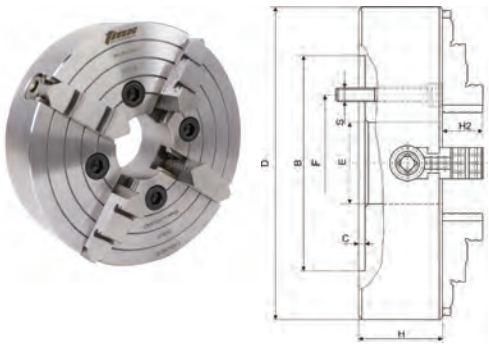
4-Jaw Plain Back

- Forged Steel Body
- Operating screws are hardened and ground
- Chucks 10" and larger have T-Slots
- Comes standard with 2-Piece Hard Reversible American Standard Tongue and Groove Jaws

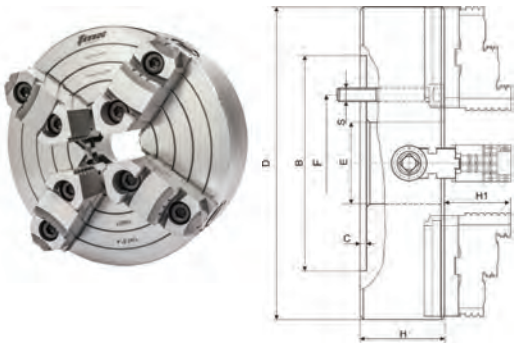
Each Chuck Provided With

- 2-Piece Jaw Chucks
  - 1 Set of Reversible Hard Master Jaws
  - 1 Set of Revesible Hard Top Jaws
- Solid Jaw Chucks
  - 1 Set Each Solid ID and OD Jaws
- 1 Chuck Wrench
- 1 Set of Mounting Bolts
- Eyebolts for chucks 16" and larger

3-855 Series
Solid Jaws



3-855 Series
2pc Jaws

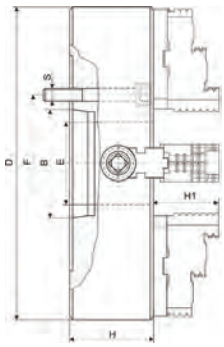


Diameter D (in)	Jaw Type	Item Number	Hole Dia E (in)	Max RPMs	Weight (lbs)	Recess Dia B (in)	Recess Depth C (in)	Bolt Circle Dia F (in)	Body Height H (in)	Jaw Height H1/H2 (in)	Hole Thread Size S
4	Solid	3-855-0401P	0.9843	6100	5.6	3.1252	0.0984	2.126	1.5748	0.67	4xM8
5	Solid	3-855-0501P	1.0236	4900	10.7	2.748	0.0984	2.126	1.6929	0.79	4xM8
6	Solid	3-855-0601P	1.6535	3820	11.1	3.25	0.0984	2.75	1.6929	0.79	4xM10
8	2pc	3-855-0800P	1.9685	3060	37.8	4.3307	0.1969	3.252	2.8543	1.8268	4xM10
10	2pc	3-855-1000P	2.5591	2450	57.8	5.9055	0.2756	4.126	3.0512	2.378	4xM12
12	2pc	3-855-1200P	3.1496	1940	106.7	6.8898	0.2756	5.252	3.4252	2.3976	4xM16
16	2pc	3-855-1600P	3.937	1530	188.9	7.874	0.3937	6.748	3.622	2.8465	4xM16
20	2pc	3-855-2000P	4.9213	1220	333.3	10.6299	0.4724	9.252	4.2126	3.8504	4xM20
25	2pc	3-855-2500P	6.2992	970	633.3	10.6299	0.4724	9.252	5	3.8504	4xM20
32	2pc	3-855-3200P	5.315	764	990	9.8425	0.1968	8.6614	4.9212	3.3071	8xM24
36	2pc	3-855-3600P	5.5118	679	1350	9.8425	0.1968	8.6614	5.315	3.3071	8xM24
40	2pc	3-855-4000P	5.9055	611	1740	11.811	0.2756	9.8425	5.5118	3.5827	8xM24
48	2pc	3-855-4800P	6.2992	509	2300	11.811	0.2756	9.8425	5.7086	3.5827	8xM24
55	2pc	3-855-5500P	6.2992	437	3530	11.811	0.2756	9.8425	5.9055	3.5827	8xM24
60	2pc	3-855-6000P	6.2992	407	4320	11.811	0.2756	9.8425	6.4961	3.5827	8xM30

Type A2 Direct Mount Independent Chucks

4-Jaw – No Need for Machining - No Adapter Plate Required

- Forged Steel Body
- Chucks 10" and larger have T-Slots
- Comes standard with 2-Piece Hard Reversible American Standard Tongue and Groove Jaws



Each Chuck Provided With

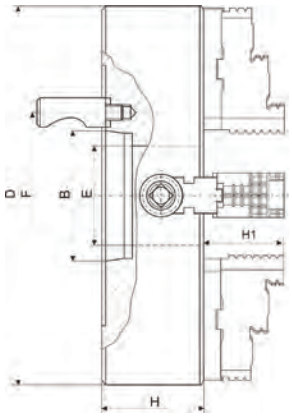
- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Set of Mounting Bolts
- 1 Chuck Wrench
- Eyebolts for chucks 16" and larger

Diameter D (in)	Mount	Item Number	Hole Dia E (in)	Max RPM	Weight (lbs)	Recess Dia B (in)	Bolt Circle Dia F (in)	Body Height H (in)	Jaw Height H1 (in)	Hole Thread Size S
8	Front- A2-6	3-856-0816P	1.9685	3060	37.8	4.188	5.252	2.8543	1.7717	4xM12
10	Front- A2-6	3-856-1016P	2.5591	2450	57.8	4.188	5.252	3.0512	2.0512	4xM12
10	Front- A2-8	3-856-1018P	2.5591	2450	57.8	5.5007	6.748	3.0512	2.0512	4xM16
12	Front- A2-6	3-856-1216P	3.1496	1940	106.7	4.188	5.252	3.4252	2.2441	8xM12
12	Front- A2-8	3-856-1218P	3.1496	1940	106.7	5.5007	6.748	3.4252	2.2441	4xM16
16	Front- A2-6	3-856-1616P	3.937	1530	188.9	4.188	5.252	3.622	2.6378	8xM12
16	Front- A2-8	3-856-1618P	3.937	1530	188.9	5.5007	6.748	3.622	2.6378	4xM16
16	Front- A2-11	3-856-1619P	3.937	1530	188.9	7.7507	9.252	3.622	2.6378	4xM20
20	Front- A2-8	3-856-2018P	4.9213	1220	333.3	5.5007	6.748	4.2126	3.1496	8xM16
20	Front- A2-11	3-856-2019P	4.9213	1220	333.3	7.7507	9.252	4.2126	3.1496	8xM20
20	Front- A2-15	3-856-2020P	4.9213	1220	333.3	11.251	13.00	4.2126	3.1496	4xM24
25	Front- A2-11	3-856-2519P	6.2992	970	633.3	7.7509	9.252	5	3.4252	8xM20
25	Front- A2-15	3-856-2520P	6.2992	970	633.3	11.251	13.00	5	3.4252	4xM24
28	Front- A2-11	3-856-2811P	4.72441	873	715	7.7514	9.2520	4.7244	2.8346	12xM20
32	Front- A2-11	3-856-3211P	5.31496	764	990	7.7514	9.2520	4.9213	2.8346	12xM20
32	Front- A2-15	3-856-3215P	5.31496	764	990	11.2520	13.0000	4.9213	2.8346	12xM24
36	Front- A2-11	3-856-3611P	5.51181	679	1353	7.7514	9.2520	5.3150	2.8346	12xM20
36	Front- A2-15	3-856-3615P	5.51181	679	1353	11.2520	13.0000	5.3150	2.8346	12xM24
40	Front- A2-11	3-856-4011P	5.90551	611	1738	7.7514	9.2520	5.5118	3.1496	12xM20
40	Front- A2-15	3-856-4015P	5.90551	611	1738	11.2520	13.0000	5.5118	3.1496	12xM24
40	Front- A2-20	3-856-4020P	5.90551	611	1738	16.2520	18.2520	5.5118	3.1496	12xM24
48	Front- A2-11	3-856-4811P	6.29921	509	2299	7.7514	9.2520	5.7087	3.1496	12xM20
48	Front- A2-15	3-856-4815P	6.29921	509	2299	11.2520	13.0000	5.7087	3.1496	12xM24
48	Front- A2-20	3-856-4820P	6.29921	509	2299	16.2520	18.2520	5.7087	3.1496	12xM24
55	Front- A2-11	3-856-5511P	6.29921	437	3531	7.7514	9.2520	5.9055	3.1496	12xM20
55	Front- A2-15	3-856-5515P	6.29921	437	3531	11.2520	13.0000	5.9055	3.1496	12xM24
55	Front- A2-20	3-856-5520P	6.29921	437	3531	16.2520	18.2520	5.9055	3.1496	12xM24
60	Front- A2-15	3-856-6015P	6.29921	407	4312	11.2520	13.0000	6.4961	3.1496	12xM24
60	Front- A2-20	3-856-6020P	6.29921	407	4312	16.2520	18.2520	6.4961	3.1496	12xM24

Type D1 Direct Mount Independent Chucks

4-Jaw – No Need for Machining - No Adapter Plate Required

- Forged Steel Body
- Chucks 10" and larger have T-Slots
- Comes standard with 2-Piece Hard Reversible American Standard Tongue and Groove Jaws



Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Chuck Wrench
- 1 Set of Camlock Studs
- 1 Set of Camlock Set Screws
- Eyebolts for chucks 16" and larger

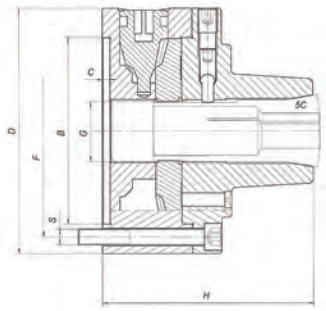
Diameter D (in)	Mount	Item Number	Hole Dia E (in)	Weight (lbs)	Max RPM	Recess Dia B (in)	Bolt Circle Dia F (in)	Body Height H (in)	Jaw Height H1 (in)	Camlock Studs		
										Qty	Dia (in)	Thread
8	D1-3	3-857-0833P	1.969	37.8	3060	2.125	2.780	2.854	1.772	3	9/16	M10x1
8	D1-4	3-857-0834P	1.969	37.8	3060	2.501	3.252	2.854	1.772	3	5/8	M10x1
10	D1-6	3-857-1036P	2.559	57.8	2450	4.188	5.252	3.091	2.051	6	7/8	M16x1.5
12	D1-6	3-857-1236P	3.150	106.7	1940	4.188	5.252	3.425	2.244	6	7/8	M16x1.5
12	D1-8	3-857-1238P	3.150	106.7	1940	5.501	6.748	3.425	2.244	6	1	M20x1.5
16	D1-6	3-857-1636P	3.937	188.9	1530	4.188	5.252	3.622	2.638	6	7/8	M16x1.5
16	D1-8	3-857-1638P	3.937	188.9	1530	5.501	6.748	3.622	2.638	6	1	M20x1.5
16	D1-11	3-857-1639P	3.937	188.9	1530	7.751	9.252	3.622	2.638	6	1-3/16	M22x1.5
20	D1-8	3-857-2038P	4.921	333.3	1220	5.501	6.748	4.213	3.150	6	1	M20x1.5
20	D1-11	3-857-2039P	4.921	333.3	1220	7.751	9.252	4.213	3.150	6	1-3/16	M22x1.5
25	D1-8	3-857-2538P	6.299	633.3	970	5.501	6.748	5.000	3.425	6	1	M20x1.5
25	D1-11	3-857-2539P	6.299	633.3	970	7.751	9.252	5.000	3.425	6	1-3/16	M22x1.5

5C & 16C Collet Chucks

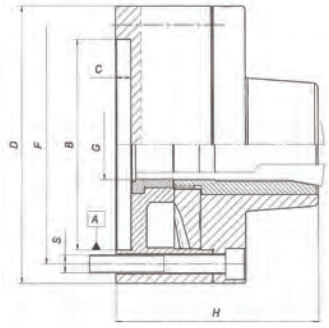
- Forged Steel Body
- All forged steel bodies
- Tru-Length type features fixed collet position for fast and accurate workpiece changes.
- Set-Tru type offers fine adjustment with 4 micro-adjustment screws for outstanding repeatability

TMX 5C and 16C collets
available on www.tmxtools.com

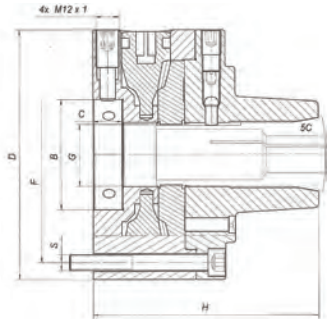
Collet Size	Diameter (in)	Type	Item Number	Weight (lbs)	Max RPM	Recess Diameter B (in)	Recess Depth C (in)	Bolt Circle Diameter F (in)	Body Height H (in)	Thread Size G	Bolt Thread Size S
5C	5	Standard	3-862-0501P	9.92	6000	3.740	0.157	4.252	4.232	1.239"-20	3xM8x65
		Tru-Length	3-862-0503P	11.46	6000	3.740	0.276	4.252	3.622	1.239"-20	3xM8x65
		Set-Tru	3-862-0505P	11.91	6000	2.165	0.591	4.252	4.488	1.239"-20	3xM8x70
16C	6	Tru-Length	3-862-0601P	20.50	6000	4.921	0.157	5.512	4.508	M47.5x1.75	3xM10x70
		Set-Tru	3-862-0605P	24.03	6000	3.386	0.709	5.512	5.059	M47.5x1.75	3xM8x85



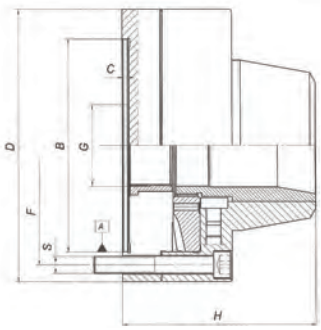
3-862-0501P
5C Standard



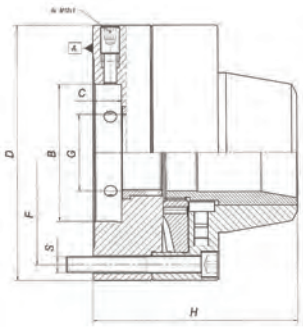
3-862-0503P
5C Tru-Length



3-862-0505P
5C Set-Tru



3-862-0601P
16C Tru-Length



3-862-0605P
16C Set-Tru

Oil Country Chucks

LARGE DIAMETER, EXTRA HEAVY DUTY

TMX Oil Country Chucks are specifically designed for rigorous use in the oil and gas industry where large thru-holes and high gripping forces are required for holding tubes and pipes. With 3-Jaw Scroll Chucks, 4-Jaw Independent Chucks, extra-large thru-holes and expanded sizes, TMX has a chuck available for any energy sector application.

- Made in Europe
- All Forged-Steel Bodies
- 2 Year Quality and Performance Warranty

Heavy Duty Construction

- TMX Oil Country Chucks are a perfect fit for the high use, high demands seen in oil and gas operations

Extra Heavy Duty American Standard Tongue and Groove Jaws

- Both top and master jaws have fine serrated matching surfaces to expand total gripping area, maximize gripping force and help reduce workpiece slippage

Exceptional Accuracy

- The high gripping power and the rigidity of the chuck body along with robust jaws contributes to superior accuracy and repeatability providing higher tolerances on workpieces and greater RPMs

Available Options

- 3-Jaw Scroll and 4-Jaw Independent Chucks
- Direct Mount for A2 and D1 Spindles
- Large Bore (Thru-Hole) Options
- 16-40" standard with larger sizes upon request
- Plain Back chucks available upon request

CONTENTS

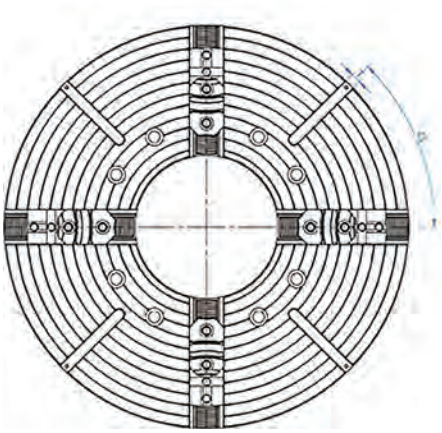
4-Jaw Extra Heavy Duty Independent Chucks

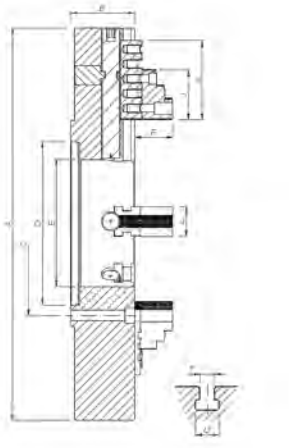
Type A2 Direct Mount, Extra Large Thru-Hole

- All Forged Steel Body
- Extra Heavy Duty Jaws

Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Set of Mounting Bolts
- 1 Chuck Wrench
- Eyebolt





A Ø Dia	Spindle Mount	Hole Dia E	Part Number	RPM	Wt (lbs)*	D Recess Dia	C Stud Circle Dia	B Body Ht	F Jaw Ht	J Top Jaw Length	K Master Jaw Length	L Guide-way	T T-Slot Width	T-Slots	M Screw	Max Torque on Key Da.N.M	Gripp-ing Force DAN
21	A2-11	7.56	3-859-2111P	1150	470	7.75	9.25	5.75	3.270	5	6.5	2.36	0.87	4x18	40	50	3125
21	A2-15	11.06	3-859-2115P	1150	470	11.25	13.00	5.75	3.270	5	6.5	2.36	0.87	4x18	40	50	3125
24	A2-11	7.56	3-859-2411P	970	661	7.75	9.25	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
24	A2-15	11.06	3-859-2415P	970	661	11.25	13.00	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
24	A2-20	12.52	3-859-2420P	970	661	16.25	18.25	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
28	A2-15	11.06	3-859-2815P	873	827	11.25	13.00	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
28	A2-20	16.06	3-859-2820P	873	827	16.25	18.25	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
32	A2-15	10.5	3-859-3215P	764	1191	11.25	13.00	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
32	A2-20	12.55	3-859-3220P	764	1191	16.25	18.25	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
32	A2-20	14.75	3-859-3222P	764	1191	16.25	18.25	6.10	3.620	5	7.99	2.95	0.87	4×22	Ø50	60	3750
36	A2-15	11.06	3-859-3615P	679	1543	11.25	13.00	6.50	3.620	5	7.99	2.95	0.87	4×22	Ø50	70	4750
36	A2-20	16.06	3-859-3620P	679	1543	16.25	18.25	6.50	3.620	5	7.99	2.95	0.87	4×22	Ø50	70	4750
40	A2-15	10.5	3-859-4015P	611	1808	16.25	18.25	6.50	3.620	5	7.99	2.95	1.1	4×22	Ø50	70	4750
40	A2-20	16.06	3-859-4020P	611	1808	16.25	18.25	6.50	3.620	5	7.99	2.95	1.1	4×22	Ø50	70	4750
40	A2-28	20.87	3-859-4028P	611	1808	16.25	18.25	6.50	3.620	5	7.99	2.95	1.1	4×22	Ø50	70	4750

All dimensions in inches (in) unless otherwise specified. *Weights are approximate.

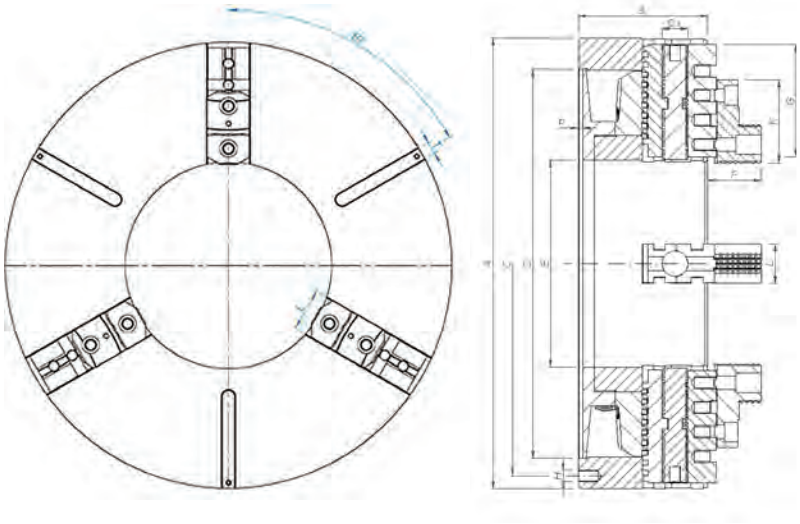
3-Jaw Extra Heavy Duty Scroll Chucks

Type A2 Mount, Extra Large Thru-Hole

- All Forged Steel Body
- Extra Heavy Duty Jaws

Each Chuck Provided With

- 1 Set of Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Set of Mounting Bolts
- 1 Chuck Wrench
- Eyebolt



Ø Dia A	Spindle Mount	Hole Dia E	Part Number	Max RPM	Weight (lbs)*	D Recess Dia	C Bolt Circle Dia	B Body Height	F Jaw Height	J Top Jaw Length	K Master Jaw Length	L Guideway Opening	T-Slots	Max Torque on key Da.N.m	Gripping Force DAN
20	A2-11	7.48	3-825-2011P	1000	560	7.75	9.25	5.87	3.43	5.32	6.65	2.13	1.97	60	3750
20	A2-15	8.07	3-825-2025P	1000	530	11.25	13	5.87	3.43	5.32	6.65	2.13	1.97	60	3750
25	A2-15	11.06	3-825-2515P	970	650.36	11.25	13	6.61	3.27	5	6.5	2.36	4x22	60	3750
25	A2-20	12.52	3-825-2520P	970	650.36	16.25	14.5	6.69	3.27	5	6.5	2.36	4x22	60	3750
28	A2-15	11.06	3-825-2815P	873	815.71	11.25	13	6.81	3.62	5	7.99	2.95	4x22	60	3750
28	A2-20	12.52	3-825-2820P	873	815.71	16.25	14.5	6.89	3.62	5	7.99	2.95	4x22	60	3750
32	A2-15	11.06	3-825-3215P	764	992.08	11.25	13	7.01	3.62	5	7.99	2.95	4x22	70	4750
32	A2-20	12.55	3-825-3220P	764	1191	16.25	18.25	6.50	3.62	5	7.99	2.95	4x23	70	4750
32	A2-20	14.75	3-825-3222P	764	1191	16.25	18.25	6.50	3.62	5	7.99	2.95	4x24	70	4750
32	A2-20	16.06	3-825-3220P	764	992.08	16.25	18.25	7.09	3.62	5	7.99	2.95	4x25	70	4750
36	A2-15	11.06	3-825-3615P	679	1433	11.25	13	7.48	3.62	5	7.99	2.95	4x22	70	4750
36	A2-20	16.06	3-825-3620P	679	1433	16.25	18.25	7.48	3.62	5	7.99	2.95	4x22	70	4750

All dimensions in inches (in) unless otherwise specified. *Weights are approximate.

Notes:

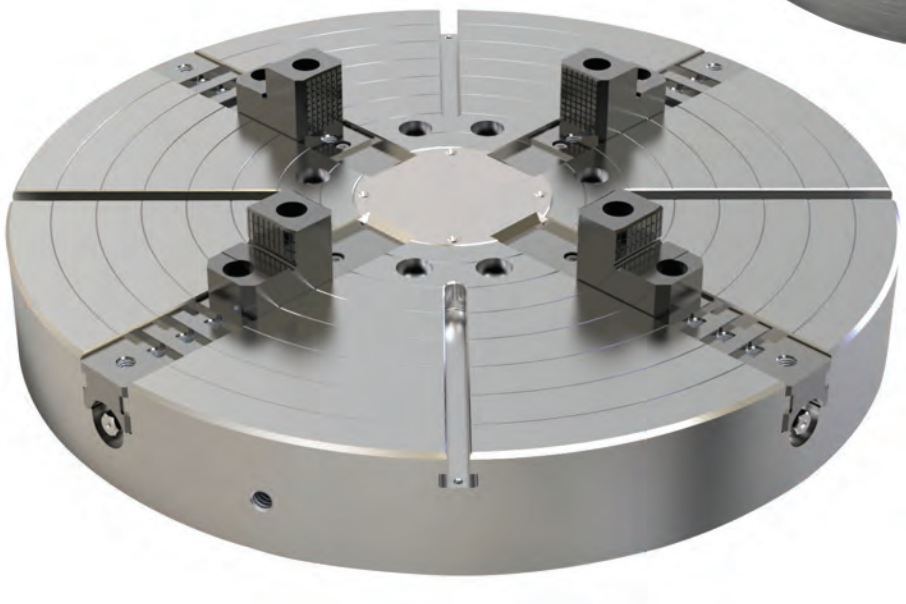
VTL Chucks

VERTICAL TURNING LATHE CHUCKS

Supplied with wipers, extra-long master jaws, and a center plug to prevent chips and contaminants entering the internal operation of the chuck, these chucks are available in both forged steel body manual and power (hydraulic) execution.

- Made in Europe
- Heavy Duty Steel Bodies
- Fitted with Wiper Seals
- Extended Master Jaws for extra rigidity
- Center Plug seals out chips and containments
- Available in sizes from 25"-80"

CONTENTS



"Custom Mounting Options" available.

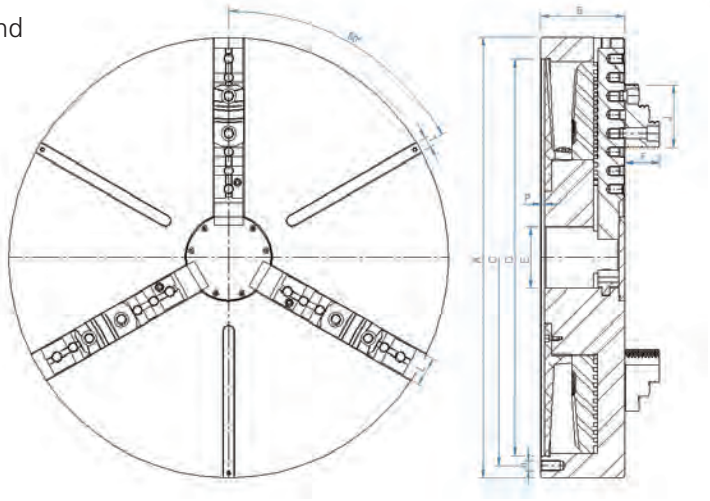
3 & 4-Jaw VTL Scroll Chucks

Self-Centering

- Forged Steel Body
- Heavy Duty Steel Body
- Fitted with Wiper Seals
- Extended Master Jaws for extra rigidity
- Center Plug seals out chips and containments

Each Chuck Provided With

- 1 Set of Extra-Long Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Chuck Wrench



3-Jaw Self-Centering VTL Chucks

# of Jaws	A Dia Ø	Part Number	Max RPM	B Body Ht	C Bolt Circle Dia	D Recess Dia	F Jaw Ht	H	J Top Jaw Length	L Guideway Opening	P	T-Slots	Max Torque on Key Da.N.M	Gripping Force DAN	Wt*	Clamping Range Ø Max	Clamping Range Ø Min
3	28	3-826-2800P	873	6.38	25.98	24.80	2.80	6xM20	5.00	2.36	0.31	4×18	70	11700	739	27.56	7.09
	32	3-826-3200P	764	6.57	29.92	28.74	2.80	6xM20	5.00	2.36	0.31	4×18	80	12300	904	31.50	7.09
	36	3-826-3600P	679	6.77	33.46	31.89	2.80	6xM22	5.00	2.36	0.31	4×18	80	11500	1246	35.43	7.09
	40	3-826-4000P	611	7.87	37.40	35.83	2.80	6xM24	5.12	2.95	0.39	4×18	140	15500	1590	39.37	7.87
	48	3-826-4800P	509	7.87	37.40	35.83	3.15	6xM24	5.12	2.95	0.39	4×22	140	15500	2646	47.24	9.45
	52	3-826-5200P															
	55	3-826-5500P	437	7.87	37.40	35.83	3.15	6xM24	5.12	2.95	0.39	4×22	140	15500	4079	55.12	9.45
	63	3-826-6300P	382	7.87	41.34	35.83	3.15	6xM30	5.12	2.95	0.39	8×22	140	15500	6173	62.99	9.45
	71	3-826-7100P	340	7.87	41.34	35.83	3.15	6xM30	5.12	2.95	0.39	8×22	140	15500	9480	70.87	9.45

4-Jaw Self-Centering VTL Chucks

# of Jaws	A Dia Ø	Part Number	Max RPM	B Body Ht	C Bolt Circle Dia	D Recess Dia	F Jaw Ht	H	J Top Jaw Length	L Guideway Opening	P	T-Slots	Max Torque on Key Da.N.M	Gripping Force DAN	Wt*	Clamping Range Ø Max	Clamping Range Ø Min
4	28	3-842-2800P	873	6.38	25.98	24.80	2.80	6xM20	5.00	2.36	0.31	4×18	70	11700	752	27.56	7.09
	32	3-842-3200P	764	6.57	29.92	28.74	2.80	6xM20	5.00	2.36	0.31	4×18	80	12300	915	31.50	7.09
	36	3-842-3600P	679	6.77	33.46	31.89	2.80	6xM22	5.00	2.36	0.31	4×18	80	11500	1257	35.43	7.09
	40	3-842-4000P	611	7.87	37.40	35.83	2.80	6xM24	5.12	2.95	0.39	4×18	140	15500	1609	39.37	7.87
	48	3-842-4800P	509	7.87	37.40	35.83	3.15	6xM24	5.12	2.95	0.39	4×22	140	15500	2712	47.24	9.45
	52	3-842-5200P															
	55	3-842-5500P	437	7.87	37.40	35.83	3.15	6xM24	5.12	2.95	0.39	4×22	140	15500	4189	55.12	9.45
	63	3-842-6300P	382	7.87	41.34	35.83	3.15	6xM30	5.12	2.95	0.39	8×22	140	15500	6327	62.99	9.45
	71	3-842-7100P	340	7.87	41.34	35.83	3.15	6xM30	5.12	2.95	0.39	8×22	140	15500	9700	70.87	9.45

All dimensions in inches (in) unless otherwise specified. *Weights are approximate.
"Custom Mounting Options" available.

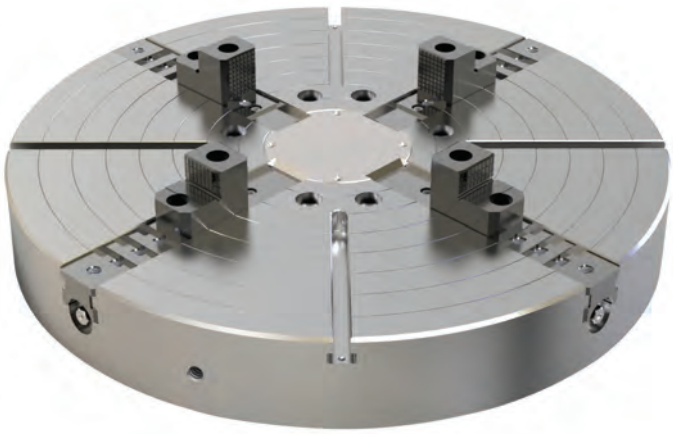
VTL Independent Chucks

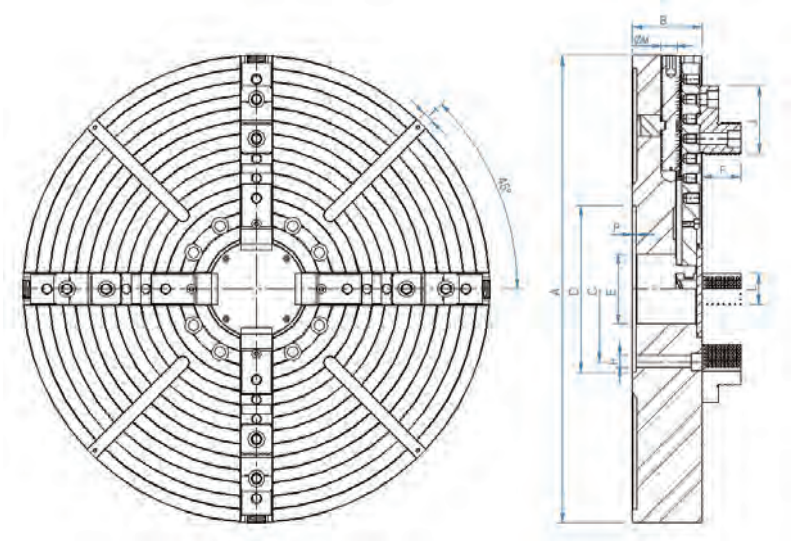
4-Jaw – Plain Back and Recessed Mount

- Forged Steel Body
- Heavy Duty Steel Body
- Fitted with Wiper Seals
- Extended Master Jaws for extra rigidity
- Center Plug seals out chips and containments

Each Chuck Provided With

- 1 Set of Extra-Long Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Chuck Wrench





Plain Back Independent VTL Chucks

A Dia Ø	Part Number	Max RPM	B Body Ht	C Bolt Circle Dia	D Recess Dia	F Jaw Ht	H	J Top Jaw Length	L Guideway Opening	M Ø Screw	T-Slots	Max Torque on Key Da.N.M	Gripping Force DAN	Wt*	Clamping Range Ø Max	Clamping Range Ø Min
24	3-858-2400P	970	5.31	9.25	11.81	2.91	8xM20	5.12	2.36	40	4×22	60	4000	529	23.62	7.09
28	3-858-2800P	873	5.31	9.25	11.81	2.91	8xM20	5.12	2.36	40	4×22	60	4000	838	27.56	7.09
55	3-858-5500P	437	6.69	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	3748	55.12	9.45
63	3-858-6300P	382	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	5732	62.99	9.45
71	3-858-7100P	340	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	6900	70.87	9.45
79	3-858-7900P	306	7.87	25.50	28.35	4.02	8xM30	7.09	3.94	64	8×28	110	7000	9259	78.74	9.45

14.96" (380mm) Recessed Mount

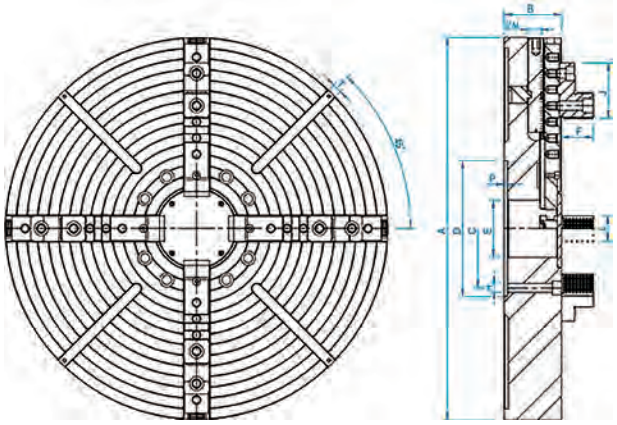
A Dia Ø	Part Number	Max RPM	B Body Ht	C Bolt Circle Dia	D Recess Dia	F Jaw Ht	H	J Top Jaw Length	L Guideway Opening	M Ø Screw	T-Slots	Max Torque on Key Da.N.M	Gripping Force DAN	Wt*	Clamping Range Ø Max	Clamping Range Ø Min
32	3-858-3200P	764	5.31	13.00	14.96	2.91	8xM24	5.12	2.36	40	4×22	70	4500	1124	31.50	7.09
40	3-858-4000P	611	5.91	13.00	14.96	3.07	8xM24	5.12	2.95	50	4×22	90	6250	1874	39.37	7.87
48	3-858-4800P	509	6.30	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	2646	47.24	9.45

All dimensions in inches (in) unless otherwise specified. *Weights are approximate.
All above diameters are also available with A type mounts. "Custom Mounting Options" available.

Type A2 Direct Mount VTL Independent Chucks

4-Jaw – No Adapter Plate Required

- Forged Steel Body
- Fitted with Wiper Seals
- Extended Master Jaws for extra rigidity
- Center Plug seals out chips and containments



Each Chuck Provided With

- 1 Set of Extra-Long Hard Master Jaws
- 1 Set of Reversible Hard Top Jaws
- 1 Chuck Wrench

Type A Direct Mount

A Dia Ø	Spindle Mount	Part Number	Max RPM	B Body Ht	C Bolt Circle Dia	D Recess Dia	F Jaw Ht	H	J Top Jaw Lgth	L Guide-way Opening	M Ø Screw	T-Slots	Max Torque on Key Da.N.M	Gripping Force DAN	Wt*	Clamping Range Ø Max	Clamping Range Ø Min
24	A2-8	3-858-2408P	970	5.31	9.25	11.81	2.91	8xM20	5.12	2.36	40	4×22	60	4000	529	23.62	7.09
	A2-11	3-858-2411P	970	5.31	9.25	11.81	2.91	8xM20	5.12	2.36	40	4×22	60	4000	529	23.62	7.09
28	A2-8	3-858-2808P	873	5.31	9.25	11.81	2.91	8xM20	5.12	2.36	40	4×22	60	4000	838	27.56	7.09
	A2-11	3-858-2811P	873	5.31	9.25	11.81	2.91	8xM20	5.12	2.36	40	4×22	60	4000	838	27.56	7.09
32	A2-11	3-858-3211P	764	5.31	13.00	14.96	2.91	8xM24	5.12	2.36	40	4×22	70	4500	1124	31.50	7.09
	A2-15	3-858-3215P	764	5.31	13.00	14.96	2.91	8xM24	5.12	2.36	40	4×22	70	4500	1124	31.50	7.09
36	A2-11	3-858-3611P	679	5.31	13.00	14.96	2.91	8xM24	5.12	2.36	40	4×22	70	4500	1378	35.43	7.09
	A2-15	3-858-3615P	679	5.31	13.00	14.96	2.91	8xM24	5.12	2.36	40	4×22	70	4500	1378	35.43	7.09
40	A2-11	3-858-4011P	611	5.91	13.00	14.96	3.07	8xM24	5.12	2.95	50	4×22	90	6250	1874	39.37	7.87
	A2-15	3-858-4015P	611	5.91	13.00	14.96	3.07	8xM24	5.12	2.95	50	4×22	90	6250	1874	39.37	7.87
	A2-20	3-858-4020P	611	5.91	13.00	14.96	3.07	8xM24	5.12	2.95	50	4×22	90	6250	1874	39.37	7.87
48	A2-11	3-858-4811P	509	6.30	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	2646	47.24	9.45
	A2-15	3-858-4815P	509	6.30	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	2646	47.24	9.45
	A2-20	3-858-4820P	509	6.30	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	2646	47.24	9.45
55	A2-11	3-858-5511P	437	6.69	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	3748	55.12	9.45
	A2-15	3-858-5515P	437	6.69	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	3748	55.12	9.45
	A2-20	3-858-5520P	437	6.69	18.25	20.47	3.07	8xM24	5.12	2.95	50	4×22	90	6250	3748	55.12	9.45
60	A2-15	3-858-6015P	407	6.89	25.50	28.35	3.07	8xM30	5.12	2.95	50	4×22	90	6250	4718	59.06	9.45
	A2-20	3-858-6020P	407	6.89	25.50	28.35	3.07	8xM30	5.12	2.95	50	4×22	90	6250	4718	59.06	9.45
63	A2-15	3-858-6315P	382	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	5732	62.99	9.45
	A2-20	3-858-6320P	382	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	5732	62.99	9.45
71	A2-15	3-858-7115P	340	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	6900	70.87	9.45
	A2-20	3-858-7120P	340	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	6900	70.87	9.45
	A2-28	3-858-7128P	340	7.28	25.50	28.35	4.02	8xM30	7.09	3.54	64	8×28	110	7000	6900	70.87	9.45
79	A2-15	3-858-7915P	306	7.87	25.50	28.35	4.02	8xM30	7.09	3.94	64	8×28	110	7000	9259	78.74	9.45
	A2-20	3-858-7920P	306	7.87	25.50	28.35	4.02	8xM30	7.09	3.94	64	8×28	110	7000	9259	78.74	9.45
	A2-28	3-858-7928P	306	7.87	25.50	28.35	4.02	8xM30	7.09	3.94	64	8×28	110	7000	9259	78.74	9.45

All dimensions in inches (in) unless otherwise specified. *Weights are approximate.

Chuck Packages for Rotary Tables, Indexers and Trunnions

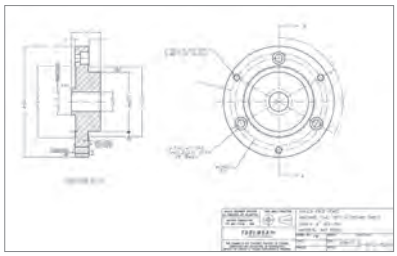
TMX Chuck Packages for Rotary Tables, Indexers and Trunnions offer convenience and productivity of a turn-key bundle that has you machining in no time. We provide the top of the line Forged Steel, 3 Jaw TMX SET-TRU® Chuck for increased precision and rigidity, custom made TMX steel adapter for interface between your system and the chuck, as well as all necessary bolts and T-nuts.

Dependent on your application, also available are 4 or 6 jaw SET-TRU®, 3 or 4 Jaw Self-Centering, 4 jaw Independent, 5C or 16C Collet chuck configurations.

With TMX chuck packages users will receive all components necessary for conversion without the worry of part compatibility or having to search multiple vendors. We have ability to manufacture chuck packages for all market leading Rotary Tables, Indexers and Trunnions.

TMX Chuck Packages for Rotary Tables, Indexers and Trunnions include:

- Forged Steel Body Chuck
- Mounting Adapter
- Bolts
- T-Nuts



TMX designs and manufactures adapters to specifically fit each Rotary Table model

Image courtesy of Haas Automation, Inc.®

Image courtesy of DMG Mori®

Each package contains either a TMX 3, 4 or 6 jaw SET-TRU®, 3 or 4 Jaw Self-Centering, 4 jaw Independent or 5C, 16C Collet chuck configurations

To learn more visit www.tmxtools.com and click on Workholding.

T-Nuts and Mounting Bolts are included

Notes:

Power Chucks

DESIGNED AND ENGINEERED FOR PRECISION

Featuring the quality and precision associated with European manufacturing, TMX Power Chucks are direct, drop-in replacements for all major machine brands including Okuma®, Mazak®, Haas®, Hyundai®, Doosan® and many more. All TMX Power Chucks are designed and engineered in the USA and are backed by a No Hassle, 2-Year Warranty. TMX also offers a full line of off the shelf accessories and supplies.

- ISO certified
- 2 Year Quality and Performance Warranty
- Direct replacements for ALL major brands

Interchangeable Top Tooling

- 1.5mm x 60° Serrations for chuck diameters up to 18" and 3mm x 60° Serrations for 21" and 24" chucks

Durable

- Heat treatment is performed to alloy steel along with an improved lubrication system to obtain high accuracy, strength and durability

High Gripping Force

- By increasing dynamic gripping force, work efficiency and safety have been greatly improved

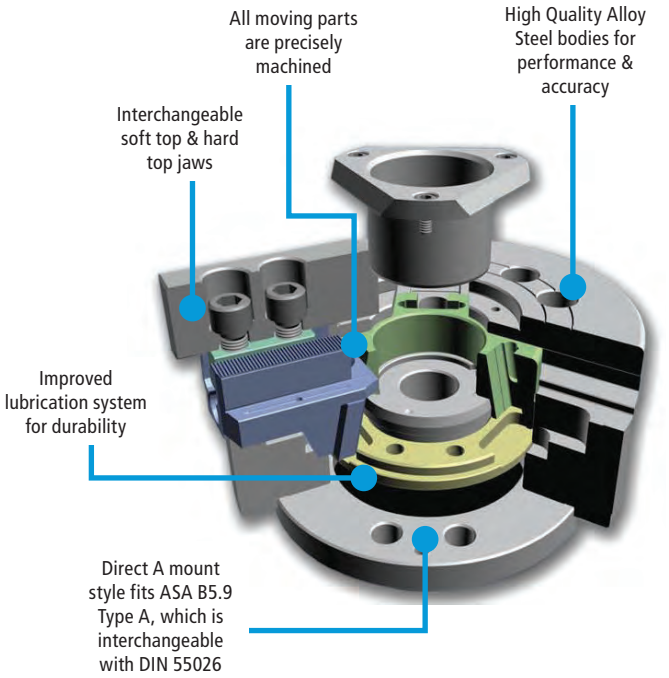
High Speed

- Strong gripping force, safety and performance are realized by optimal design resulting in higher rotational speeds

Lightweight

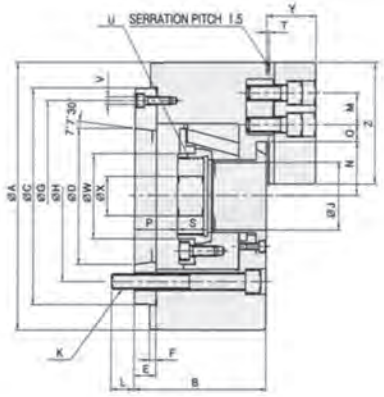
- Equipment load has been reduced by weight reduction, increasing efficiency

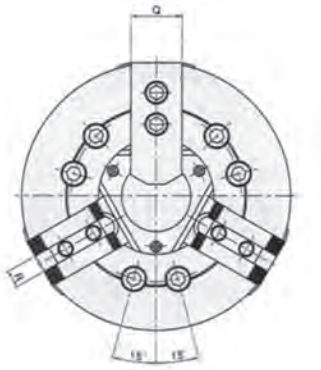
CONTENTS



3-Jaw Large Thru-Hole Direct A2 Mount Chucks

- Fits ASA B5.9 type A (interchangeable with DIN 55026)
- Performance and quality are identical to TMX Large Thru-Hole Chucks [3-780 series]
- Shorter Chuck Replacement Time - replacing and/or changing a chuck can be minimized as run-out accuracy is maintained after mounting





Chuck Dia	Part Number	Spindle Nose	WThru Hole	Jaw Stroke	Plunger Stroke	Gripping Dia Max	Gripping Dia Min	Max Permissible Input Force	Max Static Gripping Force	Max Speed	Wt	Moment of Inertia
			in					lbf		RPM	lbs	lbs*ft2
6"	3-781-0650	A2-5	1.8110	0.2165	0.5118	6.6535	0.5118	5512	14167	6000	30.2	0.0512
8"	3-781-0860	A2-6	2.0472	0.2992	0.7087	8.2677	0.4331	8995	21159	5000	52.0	0.1454
10"	3-781-1080	A2-8	3.0315	0.3346	0.7874	10.0000	1.2205	11244	28088	4200	88.2	0.2642
12"	3-781-1280	A2-8	3.5827	0.4016	0.9449	11.9685	1.3386	13043	33071	3300	141.1	0.6267
15"	3-781-1511	A2-11	4.6457	0.4173	0.9055	15.0000	1.1811	15962	40467	2500	280.0	1.9539
18"	3-781-1811	A2-11	4.6457	0.4173	0.9055	17.7165	1.1811	15962	40467	2000	392.4	3.9120
21"	3-781-2115	A2-15	5.5118	0.4173	0.9055	20.8661	3.4252	20233	52606	1700	542.3	7.5782
24"	3-781-2415	A2-15	6.4961	0.4094	0.9055	24.0157	4.3307	20233	52606	1400	670.2	13.5998

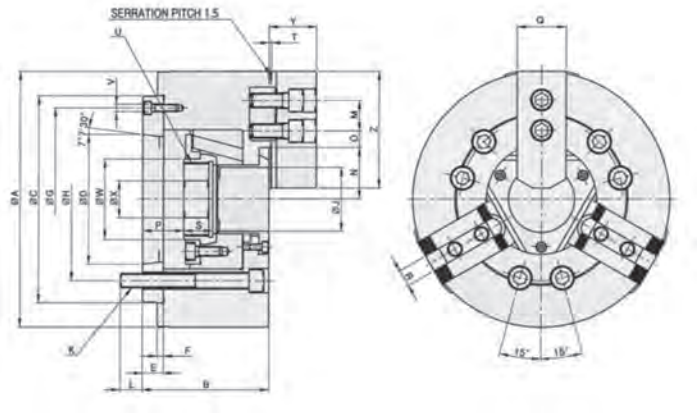
Dimensions

Chuck Dia	Part Number	A	B	C	D	E	F	G	H	J	K	L	M	N max	N min
6"	3-781-0650	6.6535	3.5433	5.5118	3.2505	0.5906	0.1969	4.5669	4.1260	1.8110	6-M10	0.6299	0.7874	1.3189	1.2087
8"	3-781-0860	8.2677	4.0551	6.6929	4.1880	0.6693	0.1969	5.9055	5.2520	2.0472	6-M12	0.7087	0.9843	1.6417	1.4921
10"	3-781-1080	10.0000	4.4488	8.6614	5.5007	0.7087	0.1969	7.4803	6.7480	3.0315	6-M16	0.9449	1.1811	2.1457	1.9803
12"	3-781-1280	11.9685	5.0000	8.6614	5.5007	0.7087	0.2362	7.4803	6.7480	3.5827	6-M16	0.9843	1.1811	2.4449	2.2323
15"	3-781-1511	15.0000	5.8661	11.8110	7.7507	0.8661	0.2362	10.2362	9.2520	4.6457	6-M20	1.1024	1.6929	3.2283	3.0197
18"	3-781-1811	17.7165	5.8661	14.9606	7.7507	0.8661	0.2362	12.5984	9.2520	4.6457	6-M20	1.1024	1.6929	3.2283	3.0197
21"	3-781-2115	20.8661	6.3386	14.9606	11.2510	1.0630	0.2362	13.0000	13.0000	5.5118	6-M22	1.3386	2.3622	3.8780	3.6693
24"	3-781-2415	24.0157	6.6929	14.9606	11.2510	1.0630	0.2362	13.0000	13.0000	6.4961	6-M22	1.3780	2.3622	4.2677	4.0630

Chuck Dia	Part Number	O max	O min	P max	P min	Q	R	S	T	U max	V	W	X	Y	Z
6"	3-781-0650	0.9055	0.3937	1.0630	0.5512	1.2205	0.4724	0.7480	0.0787	M55x2	3-M6	2.3622	0.7874	1.2992	2.5984
8"	3-781-0860	1.0630	0.3937	1.3189	0.6102	1.5354	0.5512	0.8071	0.0787	M60x2	3-M6	2.5984	1.1811	1.5354	3.3858
10"	3-781-1080	1.2205	0.4724	1.0827	0.2953	1.7323	0.6299	1.0630	0.0787	M85x2	3-M8	3.7008	1.1811	1.7717	4.2520
12"	3-781-1280	1.7717	0.5906	1.1024	0.1575	1.9685	0.8268	1.1024	0.0787	M100x2	3-M8	4.2520	1.1811	2.0079	4.3701
15"	3-781-1511	1.7244	0.7205	1.2992	0.3937	2.4409	0.8661	1.5354	0.1969	M130x2	3-M10	5.4724	2.3622	2.7559	6.4961
18"	3-781-1811	2.9055	0.7205	1.2992	0.3937	2.4409	0.8661	1.5354	0.1969	M130x2	3-M10	5.4724	2.3622	2.7559	6.4961
21"	3-781-2115	3.4449	0.8465	1.4961	0.5906	2.5591	0.9843	1.5354	0.1969	M155x3	3-M12	6.5354	3.1496	2.8740	7.0866
24"	3-781-2415	4.6260	0.8465	1.8504	0.9449	2.5591	0.9843	1.5748	0.1969	M175x3	3-M12	7.3622	3.1496	2.8740	7.0866

3-Jaw Extra Large Thru-Hole Direct A2 Mount Chucks

- Fits ASA B5.9 type A (interchangeable with DIN 55026)
- Performance and quality are identical to TMX Large Thru-Hole Chucks [3-770 series]
- Shorter Chuck Replacement Time - replacing and/or changing a chuck can be minimized as run-out accuracy is maintained after mounting
- Extra Large Thru-Hole Chucks enable a broader range of manufacturing such as bar feeder work, tube, pipe, etc.



Chuck Dia	Part Number	Spindle Nose	Thru Hole	Jaw Stroke	Plunger Stroke	Gripping Dia Max	Gripping Dia Min	Max Permissible Input Force	Max Static Gripping Force	Max Permissible Speed	Wt	Moment of Inertia
			in					lbf		RPM	lbs	lbs*ft²
6"	3-771-0650	A2-5	2.0866	0.2165	0.5118	6.6535	0.5118	5622	14167	6000	30.2	0.0512
8"	3-771-0860	A2-6	2.5984	0.2992	0.7087	8.2677	0.4331	8598	21159	5000	52.0	0.1454
10"	3-771-1080	A2-8	3.2283	0.3346	0.7874	10.0000	1.2205	11244	26986	4200	88.2	0.2642

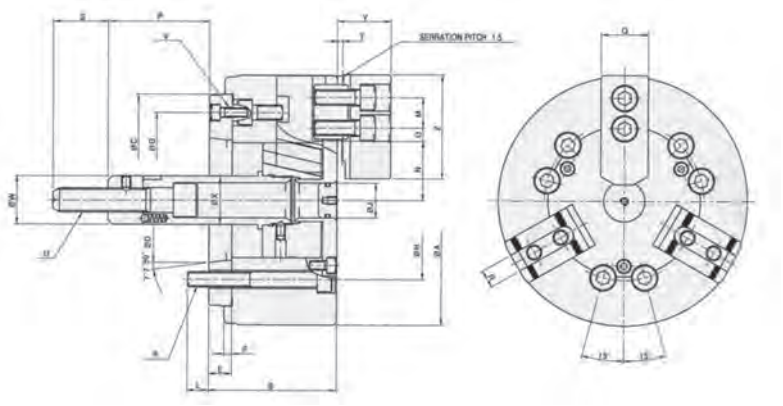
Dimensions

Chuck Dia	Part Number	A	B	C	D	E	F	G	H	J	K	L	M	N max	N min
6"	3-771-0650	6.6929	3.5827	5.5118	3.2505	0.5906	0.1969	4.5669	4.1260	2.0866	6-M10	0.6299	0.7874	1.4567	1.3480
8"	3-771-0860	8.2677	4.3701	6.6929	4.1880	1.0236	0.1969	5.9055	5.2520	2.5984	6-M12	0.8268	0.9843	1.8189	1.6693
10"	3-771-1080	10.0000	4.4488	8.6614	5.5007	0.7087	0.1969	7.4803	6.7480	3.2283	6-M16	0.9449	1.1811	2.2154	2.0551

Chuck Dia	Part Number	O max	O min	P max	P min	Q	R	S	T	U max	V	W	X	Y	Z
6"	3-771-0650	0.8268	0.3150	1.0630	0.5512	1.2205	0.4724	0.7480	0.0787	M60x2	3-M6	2.5984	0.7874	1.3189	2.8346
8"	3-771-0860	0.9154	0.4035	1.2992	0.5906	1.5354	0.5512	0.8071	0.0787	M80x2	6-M12	3.4646	1.1811	1.5354	3.7402
10"	3-771-1080	1.2205	0.4724	1.0827	0.2953	1.7323	0.6299	1.0630	0.0787	M90x2	3-M8	3.8583	1.1811	1.7717	4.3307

3-Jaw Closed Center Chucks

Direct A2 Mount, 6" thru 12"



Chuck Dia	Part Number	Spindle Nose	Jaw Stroke	Plunger Stroke	Gripping Dia Max	Gripping Dia Min	Max Permissible Input Force	Max Static Gripping Force	Max Permissible Speed	Weight	Moment of Inertia
			in				lbf		RPM	lbs	lb*ft²
6"	3-761-0650	A2-5	0.3622	0.7874	6.4961	0.7480	4273	14167	6000	30.9	0.0410
8"	3-761-0860	A2-6	0.3465	0.8268	8.2677	0.9055	6297	17990	4800	59.5	0.1208
10"	3-761-1080	A2-8	0. 3465	0.9843	10.0000	0.9449	7309	25861	4100	88.2	0.2683
12"	3-761-1280	A2-8	0.4134	1.1811	11.9685	1.0236	9332	35306	3400	145.5	0.6165

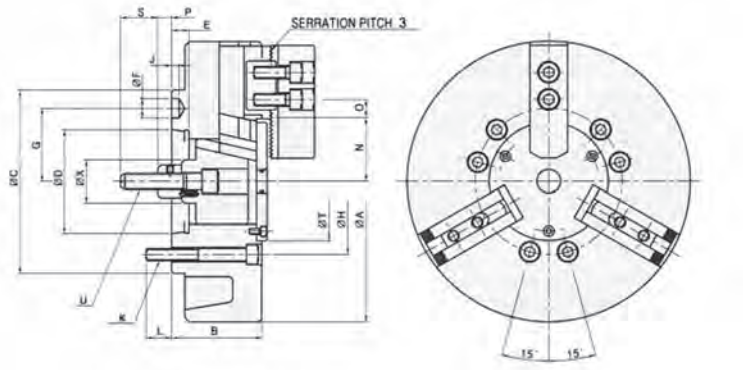
Dimensions

Chuck Dia	Part Number	A	B	C	D	E	F	G	H	J	K	L	M	N max	N min
6"	3-761-0650	6.6535	3.3071	5.5118	3.2505	0.5906	0.1969	4.5669	4.1260	0.9055	6-M10	0.5512	0.7874	1.6142	1.4449
8"	3-761-0860	8.2677	3.8189	6.6929	4.1880	0.6693	0.1969	5.9055	5.2520	1.1024	6-M12	0.7087	0.9843	1.8228	1.6496
10"	3-761-1080	10.0000	4.0157	8.6614	5.5007	0.7087	0.1969	7.4803	6.7480	1.3386	6-M16	0.9843	1.1811	2.0118	1.8386
12"	3-761-1280	11.9685	4.6457	8.6614	5.5007	0.7087	0.2362	7.4803	6.7480	1.5354	6-M16	0.9843	1.1811	2.4016	2.1929

Chuck Dia	Part Number	O max	O min	P max	P min	Q	R	S	T	U max	V	W	X	Y	Z
6"	3-761-0650	0.5118	0.2756	3.4055	2.6181	1.2205	0.4724	1.4173	0.1575	M16x2.0	3-M6	1.2598	1.2598	1.3780	2.8346
8"	3-761-0860	0.8858	0.3543	4.3307	3.5039	1.5354	0.5512	1.4173	0.1969	M20x2.5	3-M6	1.4961	1.4961	1.6929	3.7402
10"	3-761-1080	1.2087	0.4409	5.5118	4.5276	1.7323	0.6299	1.4173	0.1969	M20x2.5	3-M8	1.4961	1.7323	1.9685	4.3307
12"	3-761-1280	1.9173	0.5000	5.7087	4.5276	1.9685	0.7087	1.4173	0.1969	M20x2.5	3-M8	1.4961	1.9685	2.1260	4.3701

3-Jaw Closed Center Chucks

Direct A2 Mount, 15" thru 24"



Chuck Dia	Part Number	Spindle Nose	Jaw Stroke	Plunger Stroke	Gripping Dia Max	Gripping Dia Min	Max Permissible Input Force	Max Static Gripping Force	Max Speed	Weight	Moment of Inertia
			in				lbf		RPM	lbs	lbs*ft²
15"	3-761-1508	A2-8	0.7323	1.3780	15.0000	2.3622	16399	32797	2100	216.0	1.4583
15"	3-761-1511	A2-11	0.7323	1.3780	15.0000	2.3622	16399	32797	2100	216.0	1.4583
18"	3-761-1808	A2-8	0.7323	1.3780	17.9921	2.3622	16399	32797	1700	291.0	2.8265
18"	3-761-1811	A2-11	0.7323	1.3780	17.9921	2.3622	16399	32797	1700	291.0	2.8265
21"	3-761-2111	A2-11	0.7323	1.3780	20.8661	4.3307	21886	43283	1500	429.9	5.6120
21"	3-761-2115	A2-15	0.7323	1.3780	20.8661	4.3307	21886	43283	1500	429.9	5.6120
24"	3-761-2411	A2-11	0.7323	1.3780	24.0157	4.3307	21886	43283	1200	551.1	9.5280
24"	3-761-2415	A2-15	0.7323	1.3780	24.0157	4.3307	21886	43283	1200	551.1	9.5280

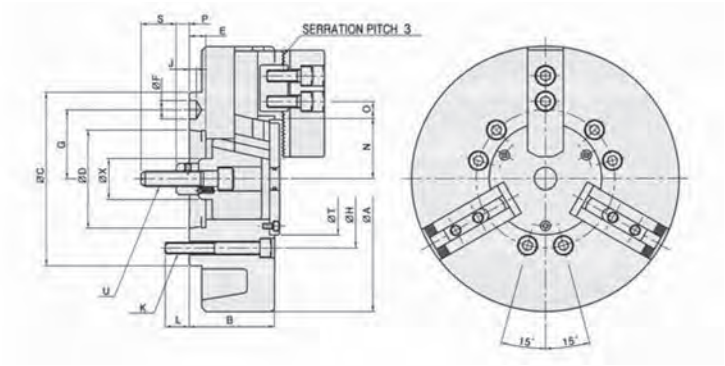
Dimensions

Dia	Part Number	A	B	C	D	E	F	G	H	J	K (ANSI)	K (JIS)
15"	3-761-1508	15.0000	4.9213	8.8583	5.5006	0.7874	0.9531	3.3750	6.7500	0.3150	5/8-11UNC	6-M16
15"	3-761-1511	15.0000	4.9213	11.0236	7.7506	0.7874	0.9531	3.3750	6.7500	0.3150	5/8-11UNC	6-M16
18"	3-761-1808	17.9921	4.9213	8.8583	5.5006	0.7874	0.9531	3.3750	6.7500	0.3150	5/8-11UNC	6-M16
18"	3-761-1811	17.9921	4.9213	11.0236	7.7506	0.7874	1.1559	4.6260	9.2520	0.3937	3/4-10UNC	6-M20
21"	3-761-2111	20.8661	5.5118	14.9606	7.7506	0.7874	1.1559	4.6260	9.2520	0.3937	3/4-10UNC	6-M20
21"	3-761-2115	20.8661	5.5118	14.9606	11.2505	0.8661	1.4059	6.5000	13.0000	0.3937	7/8-9UNC	6-M22
24"	3-761-2411	24.0157	5.5118	11.0236	7.7506	0.7874	1.1559	4.6260	9.2520	0.3937	3/4-10UNC	6-M20
24"	3-761-2415	24.0157	5.5118	14.9606	11.2505	0.8661	1.4059	6.5000	13.0000	0.3937	7/8-9UNC	6-M22

Dia	Part Number	L (ANSI)	L (JIS)	N max	N min	O max	O min	P max	P min	S	T	U	V	X
15"	3-761-1508	0.9449	0.8858	2.9331	2.5669	2.1457	0.8465	1.3780	0.0000	1.9685	6.8898	M27x3.0	3.3465	2.4803
15"	3-761-1511	0.9055	1.0236	2.9331	2.5669	2.1457	0.8465	1.3780	0.0000	1.9685	6.8898	M27x3.0	2.5591	2.4803
18"	3-761-1808	0.9449	0.8858	2.9331	2.5669	3.5630	0.8465	1.3780	0.0000	1.9685	6.8898	M27x3.0	4.7244	2.4803
18"	3-761-1811	0.9055	1.0236	2.9331	2.5669	3.5630	0.8465	1.3780	0.0000	1.9685	6.8898	M27x3.0	3.9370	2.4803
21"	3-761-2111	1.3150	1.2205	3.9961	3.6299	3.9567	0.8465	1.3780	0.0000	2.1654	8.6614	M30x3.5	4.3307	2.9528
21"	3-761-2115	1.3937	1.2598	3.9961	3.6299	3.9567	0.8465	1.3780	0.0000	2.1654	8.6614	M30x3.5	4.3307	2.9528
24"	3-761-2411	1.3150	1.2205	3.9961	3.6299	5.3740	0.8465	1.3780	0.0000	2.1654	8.6614	M30x3.5	5.7087	2.9528
24"	3-761-2415	1.3937	1.2598	3.9961	3.6299	5.3740	0.8465	1.3780	0.0000	2.1654	8.6614	M30x3.5	5.7087	2.9528

3-Jaw Closed Center Chucks

Direct A2 Mount, 32" thru 63"



Chuck Dia	Part Number	Jaw Stroke	Plunger Stroke	Gripping Dia Max	Gripping Dia Min	Max Permissible Input Force	Max Static Gripping Force	Max Speed	Weight	Moment of Inertia
		in				lbf		RPM	lbs	lbs*ft²
32"	3-761-3200	0.7323	1.4961	31.4961	7.8740	25927	46453	800	751.8	0.4977
40"	3-761-4000	1.8110	2.2441	39.3701	7.0866	40452	71915	630	1322.8	1.4399
50"	3-761-5000	1.8110	2.2441	49.2126	7.8740	40452	71915	500	1763.7	3.0272
63"	3-761-6300	1.8110	2.3622	62.9921	12.5984	40452	71915	280	3527.3	10.4395

Dimensions

Chuck Dia	Part Number	A	B	C	E	G	H	K (JIS)	L (JIS)
32"	3-761-3200	31.4961	5.9055	14.9606	0.2362	13.0000	13.0000	6-M24	1.2205
40"	3-761-4000	39.3701	7.0866	20.4724	0.3150	18.2520	18.2520	6-M24	1.2598
50"	3-761-5000	49.2126	7.0866	20.4724	0.3150	18.2520	18.2520	6-M24	1.2598
63"	3-761-6300	62.9921	8.6614	28.3465	0.3150	25.4961	25.4961	6-M30	1.8110

Chuck Dia	Part Number	N max	N min	P max	P min	S	T	U	X
32"	3-761-3200	3.9764	2.5157	1.3780	-0.1181	2.3622	10.6299	M30xP3.5	4.4882
40"	3-761-4000	8.1496	6.0630	1.2598	-0.9843	2.6772	13.3858	M30xP3.5	2.3622
50"	3-761-5000	–	–	1.2598	-0.9843	2.6772	13.3858	M36xP4.0	2.3622
63"	3-761-6300	–	–	0.5118	-1.8504	2.6772	15.3543	M36xP4.0	2.3622

Soft Top Jaws, Serration 1.5mm x 60

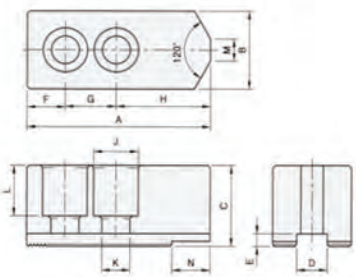


Fig. 1

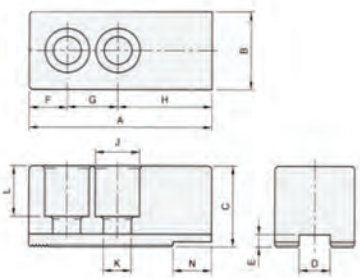


Fig. 2

Chuck Dia	Part Number	Fig.	Serration	A	B	C	D	E	F	G	H	J	K	L	M	N
6"	3-788-306	1	1.5x60°	2.8346	1.2205	1.2402	0.4724	0.1969	0.5906	0.7874	1.4567	0.6890	0.4331	0.7677	0.4724	0.5906
8"	3-788-308	1	1.5x60°	3.7402	1.4567	1.4764	0.5512	0.1969	0.7874	0.9843	1.9685	0.7874	0.5512	0.8858	0.4724	0.7874
10"	3-788-310	1	1.5x60°	4.3307	1.7323	1.752	0.6299	0.1969	1.1811	1.1811	1.9685	0.7874	0.5512	1.122	0.5906	0.7874
12"	3-788-312	2	1.5x60°	4.3701	1.9291	1.9488	0.8268	0.1969	0.8268	1.1811	2.3622	0.9843	0.6693	1.2402	–	–
15 & 18"	3-788-315	2	1.5x60°	6.4961	2.3228	2.3425	0.8661	0.315	1.8504	1.6929	2.9528	1.2598	0.8661	1.4173	–	–
21"	3-788-321	2	3.0x60°	7.0866	2.3228	2.3425	0.9843	0.374	1.5748	2.3622	3.1496	1.2598	0.8661	1.4173	–	–

Hard Top Jaws, Serration 1.5mm x 60

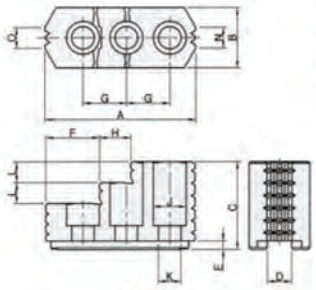


Fig. 1

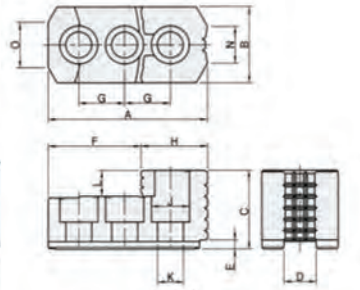


Fig. 2

Chuck Dia	Part Number	Fig.	Serration	A	B	C	D	E	F	G	H	J	K	L	M	N	O
6"	3-787-306	1	1.5x60°	2.9724	1.2205	1.6142	0.4724	0.1969	1.1811	0.7874	0.4724	0.6890	0.4331	0.3937	0.3937	0.5906	–
8"	3-787-308	1	1.5x60°	3.4252	1.5354	2.0079	0.5512	0.1969	1.0630	0.9843	0.8661	0.7480	0.5118	0.4724	0.4724	0.4724	0.5906
10"	3-787-310	1	1.5x60°	3.9764	0.3937	2.1260	0.6299	0.1969	1.6929	1.1811	6.8504	0.7480	0.5118	0.5118	0.5906	0.5906	0.7087
12"	3-787-312	2	1.5x60°	4.1654	1.9685	2.0472	0.8268	0.1969	2.3819	1.1811	1.7835	0.9843	0.6693	0.6693	1.1811	1.1811	0.5906
15 & 18"	3-787-315	1	1.5x60°	6.2677	2.4409	3.3858	0.8661	0.3150	2.5984	1.6929	1.3780	1.2598	0.8268	0.7874	1.5748	1.5748	1.1811
21"	3-787-321	2	3.0x60°	6.2795	3.1496	3.5433	0.9843	0.0787	4.0740	1.9685	2.2126	1.2598	0.8661	1.5748	2.1654	–	1.5748

T-Nuts

Chuck Dia	Part Number	A	B	C	F	G	H (h6)	Bolt Size
6-1/4"	3-789-906	0.0271	0.0543	0.0287	0.0310	0.0116	0.0186	M10*P1.5
8"	3-789-908	0.0318	0.0713	0.8071	0.0318	0.0131	0.0217	M12*P1.75
10"	3-789-910	0.0348	0.0790	0.0333	0.0440	0.0131	0.0248	M12*P1.75
12-1/2"	3-789-912	0.0456	0.0829	0.0426	0.0465	0.0178	0.0325	M16*P2.0
15-3/4"	3-789-915	0.0519	0.1240	0.0705	0.0666	0.0256	0.0372	M20*P2.5

Draw Tube Nut Blanks

Chuck Dia	Part Number
6"	3-789-0601
8"	3-789-0801
10"	3-789-1001
12"	3-789-1201
15"	3-789-1501

Notes:

Centers & Rotating Bodies

ENGINEERED & MANUFACTURED IN EUROPE

Live Centers

- Precisely machined, hardened and ground from one single piece of of high quality alloy steel, heat treated to RC 60-62
- Each live center is provided with three selected heavy-duty precision bearings
- Each bearing is specifically protected against dust and coolant

Dead Centers

- Precisely machined, hardened and ground from one single piece of steel forging case hardened to 61-63HRC
- T.I.R. of 0.0002"

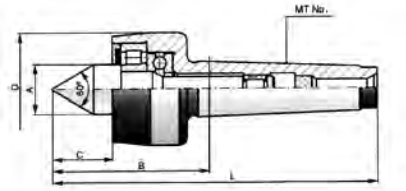
Rotating Bodies

- Designed for use with interchangeable tapered heads or with 3", 4" and 5" front mounting, self-centering chucks
- Steel body construction with hardened and ground scroll and pinions

CONTENTS

Precision & Super Precision Live Centers

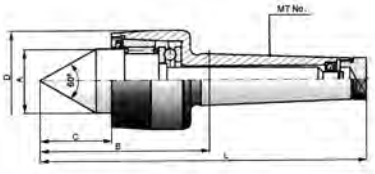
- Each center hardened and ground from one single piece of forging
- Spindles are made of high quality alloy steel & heat treated to RC 60-62
- 3 precision high-quality bearings are protected by a special steel shield and neoprene seal
- Each bearing is specifically protected against dust and coolant



Morse Taper	Precision		Super Precision		Max Wt of Workpiece (lbs)	RPM max	Wt (lbs)	Diameter D (in)	Point Diameter A (in)	Overall Length L (in)	Point Length C (in)	Projection Length B (in)
	Part Number	T.I.R.	Part Number	T.I.R.								
1	3-565-001	0.0003	3-565-101	0.0002	220	5000	.64	1.50	0.59	4.07	0.70	1.97
2	3-565-002	0.0003	3-565-102	0.0001	460	5000	1.00	1.57	0.70	4.74	0.87	2.22
3	3-565-003	0.0003	3-565-103	0.0001	925	4000	2.13	2.20	0.98	6.14	1.12	2.95
4	3-565-004	0.0003	3-565-104	0.0001	1850	3000	3.85	2.52	1.10	7.24	1.24	3.21
5	3-565-005	0.0004	3-565-105	0.0002	4400	2500	8.37	3.35	1.61	9.33	1.77	4.23
6	3-565-006	0.0004	3-565-106	0.0002	7700	2000	26.43	5.12	2.48	13.13	2.52	5.96

Ultra Precision Adjustable Live Centers

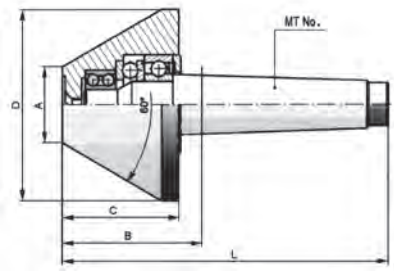
- Easy to adjust
- Adjustable, ultra precision radial bearing reduces run out to minimum after much use
- Heavy Duty
- Triple Bearing
- T.I.R. 0.00012



Morse Taper	Part Number	Max Wt of Workpiece lbs	Thrust lbs at 1000 RPM	RPM max	Weight (lbs)	Overall Length L (in)	Projection Length B (in)	Point Length C (in)	Diameter D (in)	Point Diameter A (in)
2	3-567-002P	220	90	8000	1.33	5.41	2.87	1.02	1.73	0.91
3	3-567-003P	440	170	6000	1.95	6.53	3.37	1.26	1.89	1.10
4	3-567-004P	880	350	4500	3.62	7.89	3.88	1.69	2.36	1.53
5	3-567-005P	1430	550	4000	7.17	9.80	4.70	2.01	2.76	1.77
6	3-567-006P	3080	1200	3000	17.20	12.64	5.47	2.44	3.70	2.40

Bull Head Live Centers

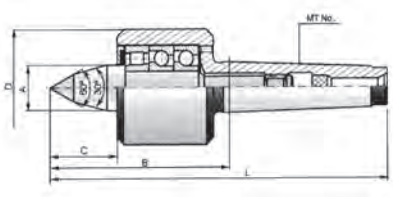
- Centers are designed to hold pipe and hollow work
- Triple bearing design
- Three matched bearings are preloaded at the factory
- Good thrust and radial capabilities
- Bearings are protected by a special seal
- Head is made of high quality Alloy Steel and heat treated to RC 61-63
- 60 degree head angle



Morse Taper	Part Number	T.I.R.	RPM max	Max Weight of Workpiece (lbs)	Weight (lbs)	Overall Length L (in)	Minimum Point Diameter A (in)	Projection Length B (in)	Head Length C (in)	Diameter D (in)
1	3-575-010P	0.0003	5000	220	0.77	3.66	0.79	1.56	1.38	1.97
2	3-575-020P	0.0003	5000	400	1.32	4.11	1.18	1.6	1.38	2.36
2	3-575-021P	0.0003	4500	660	2.76	4.84	1.18	2.32	2.09	3.15
3	3-575-030P	0.0003	4500	770	2.98	5.51	1.18	2.32	2.09	3.15
3	3-575-031P	0.0003	3000	1210	5.07	5.83	1.57	2.64	2.4	3.93
4	3-575-040P	0.0003	3000	1320	5.62	6.73	1.57	2.7	2.4	3.93
4	3-575-042P	0.0004	3000	1540	11.00	7.09	2.76	3.05	2.76	5.51
5	3-575-051P	0.0008	2000	1653	17.60	8.15	3.94	3.05	2.76	6.69
6	3-575-060P	0.002	1000	4400	75.00	11.73	7.09	4.57	4.21	11.5

NC Quad-Bearing Live Centers

- Heavy duty
- High speed
- 7000 to 6000 RPM

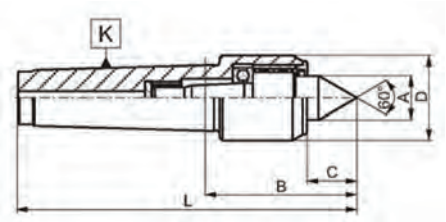


Morse Taper	Part Number	T.I.R.	RPM max	Max Wt of Workpiece lbs	Weight lbs	Overall Length L (in)	Point Diameter A (in)	Projection Length B (in)	Point Length C (in)	Diameter D (in)
4	3-566-004P	0.0002	7000	2200	5.50	8.62	1.10	4.58	1.91	2.76
5	3-566-005P	0.0002	6000	4400	11.00	11.00	1.57	5.87	2.64	3.47

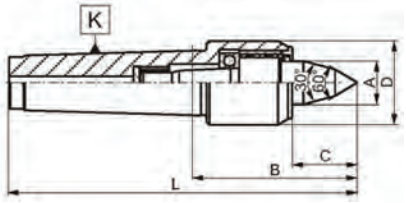
Slim Casing Live Centers

- For counter-clamping workpieces on turning and grinding machines
- Especially suited for cramped work area between center point and workpiece
- Enlarged work area and better workpiece accessibility thanks to narrow casing diameter
- Maximum rigidity at high speeds thanks to compact design
- Maximum concentricity deviation of 0.0002 in for maximum precision

3-560 Series Slim Casing



3-561 Series Extended Point

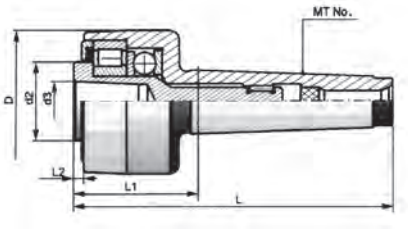


Morse Taper	Part Number	Max. Workpiece Weight (lbs)	RPM Max	Weight (lbs)	Overall Length L (in)	Point Diameter A (in)	Projection Length B (in)	Point Length C (in)	Diameter D (in)
Slim Casing									
2	3-560-002P	440	7000	0.7	4.961	0.591	2.441	0.709	1.260
3	3-560-003P	880	7000	0.9	5.630	0.591	2.441	0.709	1.339
4	3-560-004P	1760	6300	2.0	7.008	0.787	2.972	0.984	1.654
5	3-560-005P	3530	4300	5.5	9.154	1.181	4.055	1.339	2.284
6	3-560-006P	7720	3000	17.2	12.756	1.654	5.571	1.929	3.150
Slim Casing with Extended Center Point									
2	3-561-002P	370	7000	0.7	5.394	0.591	2.874	1.142	1.260
3	3-561-003P	750	7000	0.9	6.142	0.591	2.953	1.221	1.221
4	3-561-004P	1540	6300	2.2	7.520	0.787	3.484	1.496	1.496
5	3-561-005P	3090	4300	5.7	9.843	1.181	4.744	2.028	2.028
6	3-561-006P	6610	3000	17.6	13.622	1.654	6.437	2.795	2.795

Live Centers with Interchangeable Inserts

- Body of live centers and inserts are made of forgings, hardened and precisely ground
- Sets are provided with the main body and seven different style inserts
- Precision high quality bearings
- Special sealing ring protects the bearings from coolant and dust
- Inserts are easily interchangeable

Visit www.tmxtools.com for interchangeable inserts offering



Morse Taper	Set Part Number	Body Only Part Number	T.I.R.	Max Wt of Workpiece lbs	RPM Max	Weight without insert (lbs)	Overall Length L (in)	Projection Length L1 (in)	L2 (in)	Diameter D (in)	d2 (in)	d3 (in)
2	3-570-002P	3-570-102P	0.0008	220	5000	0.98	4.055	1.54	0.177	1.57	0.71	0.28
3	3-570-003P	3-570-103P	0.0008	440	4000	2.02	5.217	2.03	0.197	2.20	0.98	0.47
4	3-570-004P	3-570-104P	0.0008	880	3000	3.71	6.220	2.19	0.217	2.52	1.10	0.59
5	3-570-005P	3-570-105P	0.0012	1770	2500	8.00	7.815	2.72	0.256	3.35	1.61	0.87
6	3-570-006P	3-570-106P	0.0012	3550	2000	25.40	10.846	3.7	0.256	5.12	2.48	1.89

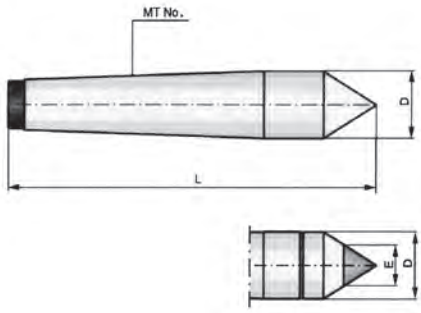
Dead Centers

Carbide Tipped & Steel

- Designed for use whereever high accuracy is required
- T.I.R. ±0.0001in
- Case hardened to 61-63HRC
- Carbide Tipped Centers give longer tool life and require less regrinding

3-555 Series Ball Bearing Steel

3-550 Series Carbide Tipped



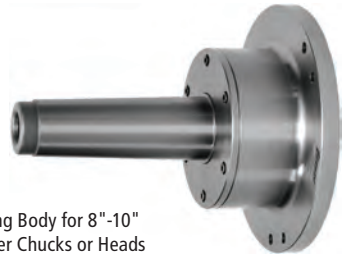
Morse Taper	Ball Bearing Steel Part Number	Carbide Tipped Part Number	Overall Length L (in)	Diameter D (in)	Point Diameter E (in)	Weight (lbs)
1	3-555-005P	3-550-005P	3.15	0.48	0.28	0.13
2	3-555-010P	3-550-010P	3.94	0.71	0.28	0.44
3	3-555-015P	3-550-015P	4.92	0.95	0.43	0.66
4	3-555-020P	3-550-020P	6.30	1.24	0.55	1.50
5	3-555-025P	3-550-025P	7.87	1.76	0.71	4.00
6	3-555-030P	3-550-030P	10.63	2.51	0.74	11.50

Rotating Bodies

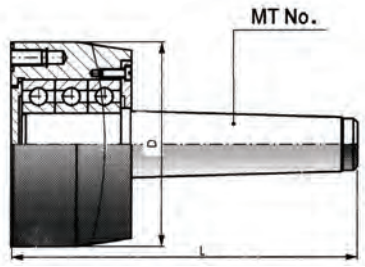
For Chucks & Interchangeable Heads

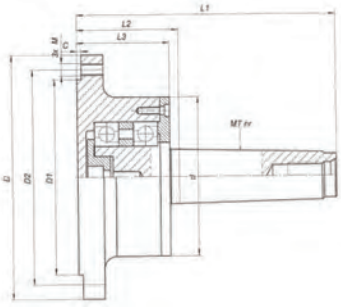
- Designed for use with interchangeable tapered heads or with 3", 4", and 5" front mounting, self-centering chucks
- Steel body construction with hardened and ground scroll and pinions
- Hardened and ground MT shank
- Triple bearing design
- Sealed ball bearings, lubrication through roller
- Bodies, chucks and heads sold separately

Rotating Body for 3"-6" Diameter Chucks or Heads



Rotating Body for 8"-10" Diameter Chucks or Heads





Rotating Bodies for 3"-6" Diameter Chucks or Heads

Chuck/Head Diameter (in)	Morse Taper	Body Only Part Number	T.I.R.	Max RPM	Max Workpiece Weight (lbs)	Weight (lbs)	Overall Length L (in)	Body Diameter D (in)
3	2	3-573-032P	0.002	4000	1543	4.38	4.84	3.07
3	3	3-573-033P	0.002	4000	1543	2.40	5.52	3.07
4	3	3-573-043P	0.002	3500	2205	8.00	5.63	3.86
4	4	3-573-044P	0.002	3500	2205	7.90	6.54	3.86
5	3	3-573-053P	0.002	3200	3307	14.50	5.98	4.84
5	4	3-573-054P	0.002	3200	3307	15.30	6.89	4.84
5	5	3-573-055P	0.002	3200	3307	7.95	7.95	4.84
6	5	3-573-065P	0.002	3000	3900	16.50	8.07	6.30

Rotating Bodies for 8"-10" Diameter Chucks or Heads

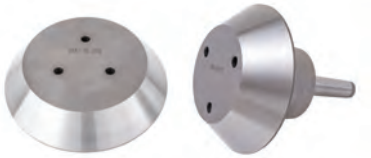
Chuck/ Head Diameter (in)	Morse Taper	Part Number	T.I.R.	Max RPM	Max Workpiece Wt (lbs)	Wt (lbs)	Point Length C (in)	Dia D (in)	Boss Dia D1 (in)	Bolt Circle Dia d2 (in)	Overall Length L1 (in)	Gage Length L2 (in)	Projection Length L3 (in)	Hole Thread Size M (in)
8	5	3-573-085P	0.0008	2800	550	48.5	0.138	7.874	6.299	6 .929	9.212	4.291	3.858	M10
8	6	3-573-086P	0.0008	2800	550	48.5	0.138	7.874	6.299	6.929	11.378	4.291	3.858	M10
10	5	3-573-105P	0.0008	2500	1100	48.5	0.138	9.843	7.874	8.819	9.212	4.291	3.858	M12
10	6	3-573-106P	0.0008	2500	1100	48.5	0.177	9.843	7.874	8.819	11.378	4.291	3.858	M12

Compatible with Front Mount Scroll Chucks

3-813

3-814

Interchangeable Tapered Heads available on www.tmxtools.com



Milling Machine Vises

ENGINEERED & MANUFACTURED IN TAIWAN

Single Station Vises

- 7.5", 8.9"or 10" Jaw Openings
- 10 Year Warranty
- Body made from high quality ductile iron hardened to 45RC
- Sealed bearing system increases the life of the vise
- Close tolerance bed heights for excellent accuracy
- Anti-lift mechanism keeps the workpiece from lifting
- Chip cover for lead screw protection

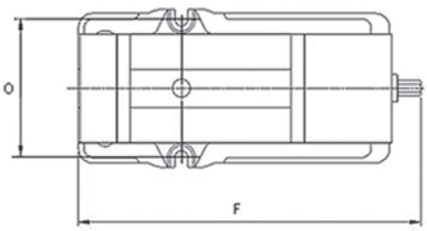
Double Station Vises

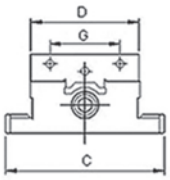
- Double station can clamp two dissimilar workpieces with same force at same time and provides 6 different clamping positions
- Clamping Force Equalization (patented) ensures same clamping force to clamp two different size/shape workpieces and avoid deflection and lift
- Lockwell Anti-Lift Mechanism (patented) & Automatic Return Mechanism (patented) ensures the workpiece does not deflect and lift
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°
- Unique design facilitates the evacuation of chips
- U.S.A. patented

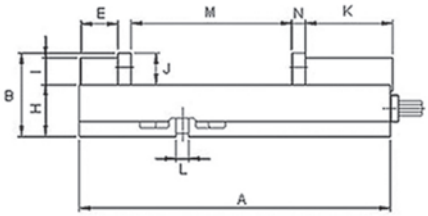
CONTENTS

Single Station Vises

- 7.5", 8.9"or 10" Jaw Openings
- 10 Year Warranty
- Body made from high quality ductile iron hardened to 45RC
- Sealed bearing system increases life of the vise
- Close tolerance bed heights for excellent accuracy
- Anti-lift mechanism keeps the workpiece from lifting
- Chip cover for lead screw protection





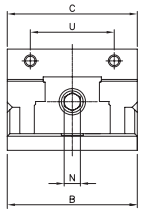


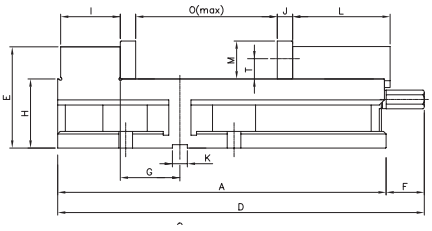
Part Number	A	B	C	D	E	F	G	H Bed Height +/- 0.0005	I	J	K	L	Jaw Opening M	N	O	Wt lbs	Max Clipping Force
3-220-006	17.008	4.627	9.252	5.984	2.047	19.094	3.875	2.875	1.496	1.752	4.843	0.688	7.559	0.709	7.64	79	8,200
3-220-0068	17.205	4.627	8.75	5.984	2.047	18.937	3.875	2.875	1.496	1.752	4.843	0.688	8.898	0.709	7.64	80	9,840
3-220-0081	21.85	5.515	11.614	7.992	2.283	23.031	4.724	3.310	1.969	2.205	6.181	0.813	10.433	0.953	10	150	11,600

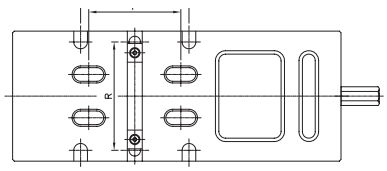
*All dimensions in inches unless otherwise indicate d; dimensions and weights are approximate

Wellock Versatile Vise

- Vise for basic single station CNC. Features prevent lift of workpiece and provides high accuracy
- Two operating positions for VMC, upright & lay down
- One horizontal operating position for HMC2
- 3. Material of MG/MGR:FCD-60



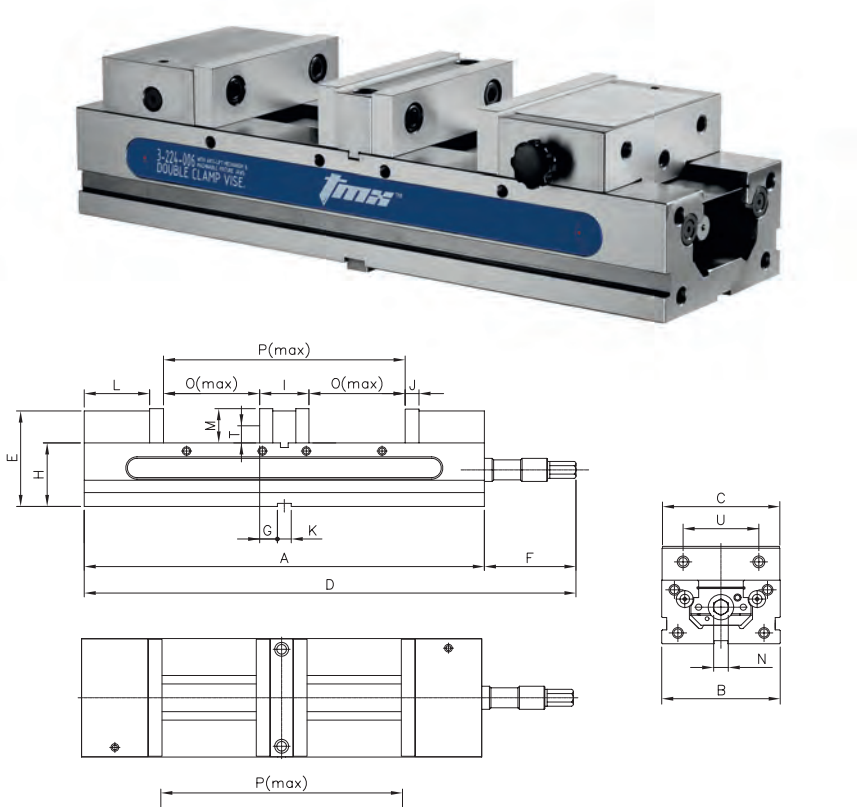




Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	T	U	Weight
3-227-006	12.44	4.09	4.01	13.54	3.60	1.10	2.5	2.5	2	0.59	0.5	3.93	1.37	0.55	5.11	3.34	4	3.14	0.68	2.5	44.09

Double Station Vises

- Double station can clamp two dissimilar workpieces with same force at same time and provides 6 different clamping positions
- Clamping Force Equalization (patented) ensures same clamping force to clamp two different size/ shape workpieces and avoid deflection and lift
- Lockwell Anti-Lift Mechanism (patented) & Automatic Return Mechanism (patented) ensures the workpiece does not deflect and lift
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°
- Unique design facilitates the evacuation of chips
- U.S.A. patented



Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	T	U	Weight
3-224-004	15.94	4.09	4.01	18.07	3.79	2.12	1.08	2.5	2.16	0.59	0.70	2.71	1.49	0.55	3.54	9.25	0.68	2.5	44.09
3-224-006	20.47	6.06	5.98	21.10	4.88	0.62	1.29	3.25	2.59	0.70	0.70	3.40	1.75	0.74	4.92	12.44	0.93	3.87	114.64

Notes:

EUROPEAN PRECISION & QUALITY

WORKHOLDING

34 Talbot Road
Northborough, MA 01532

Toll Free: 1-844-TMX-TOOL (1-844-869-8665)

International: +1-508-653-8897

Fax: 508-653-5110

Email: support@tmxtools.com

www.tmxtools.com

4-999-1900 v7.1 2019-10