VETERAN OWNED AND OPERATED

SHOP-FORCE

CNC TOOLING SOLUTIONS

MASTER TOOLING CATALOG

WWW.SHOP-FORCE.COM

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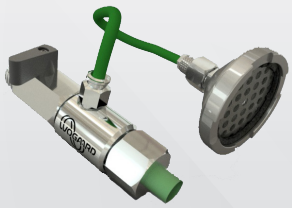

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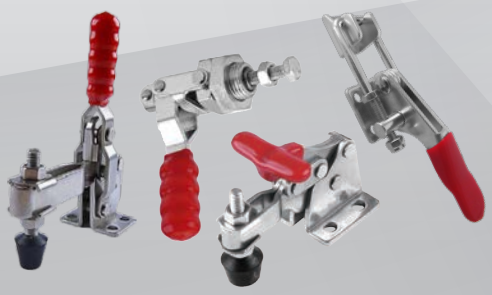

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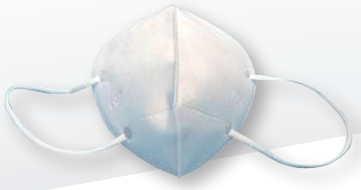
Workplace Safety

FDA/CE CERTIFIED 3 LAYER MASKS
00001

- FDA/CE certified
- Single use, disposable
- Nonwoven fabric, high density filter layer, skin-friendly composite fiber

FDA/CE CERTIFIED KN95 MASKS
00002



- 5 Layers of protection
- Up to 95% filtration
- Elastic ear loops and no pressure to the ears
- Comfortable to wear and provides safety seal

INFRARED THERMOMETER GUN
00003

- Distance: 0.39"-2"
- Time: <1 Second
- Range 93.3°F - 109.2°F (34°C-42.9°C)
- Auto shutdown <18 seconds
- 3 color display

HAND SANITIZER GEL
HSG001 GAL **HSG055** DRUM
HSG005 PAIL **HSG275** TOTE

HAND SANITIZER LIQUID
HSL001 GAL **HSL055** DRUM
HSL005 PAIL **HSL275** TOTE

- 80% ethanol antiseptic topical solution

X BLEACH

BLEACH1 GAL **BLEACH55** DRUM
BLEACH5 PAIL **BLEACH275** TOTE

- 5x concentration bleach
- Can be used in its present state or diluted

HP DISINFECTANT
HP001 GAL **BLEACH55** DRUM
HP005 PAIL **BLEACH275** TOTE

- Hydrogen peroxide 255 concentrated multi-surface cleaner
- Used extensively in second phase cleaning
- Immediately kills viruses and biological matter

LIBERTY-FOAM™ DISINFECTING SOAP
00004

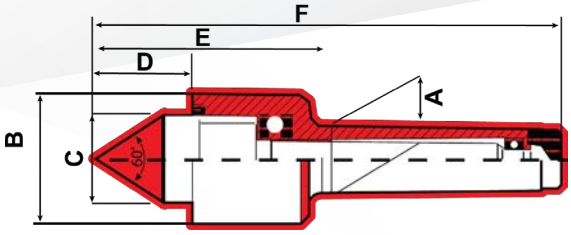
- 9oz. hand sanitizing foam made from all-natural ingredients
- No alcohol and no fragrance
- Can be left on like sanitizer or washed away like traditional soap

QC SURFACE
QC001 GAL **QC055** DRUM
QC005 PAIL **QC275** TOTE

- Quant amine-chloride multi-surface spray cleaner
- Used in disinfecting all surfaces
- Ready to use, applied via spray bottle or fogged in hard to reach areas
- Used aggressively in mold remediation and water damage

Super-Precision Low-Profile Live Centers

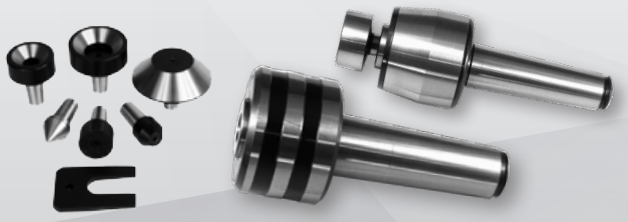
High-precision & high-speed design
Designed for easy lubrication for long life
One-piece body & spindle made of high-quality forged alloy steel
Hardened to 60 HRC and precisely ground
60° Included Angle
Front bearings are protected by a special steel/elastomer ring
Thrust bearings with hardened frame provide excellent rigidity and accuracy
Rear bearings strengthen and support for radial load

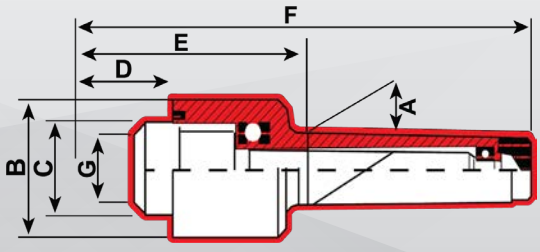


Order No	Description	MT Size	A	B	C	D	E	F	T.I.R.	Max RPM	Max Load
L0005	1MT PRECISION LIVE CENTER	1	0.475"	1.339"	0.709"	0.787"	2.402"	4.528"	0.0004"	5000	900N
L0004	2MT PRECISION LIVE CENTER	2	0.7"	1.772"	0.984"	1.024"	3.15"	5.709"	0.0004"	5000	1500N
L0003	3MT PRECISION LIVE CENTER	3	0.938"	2.047"	1.102"	1.181"	3.503"	6.693"	0.0004"	4200	2000N
L0001	4MT PRECISION LIVE CENTER	4	1.231"	2.362"	1.26"	1.366"	4.102"	8.098"	0.0004"	3200	3200N
L0002	5MT PRECISION LIVE CENTER	5	1.748"	3.031"	1.772"	1.772"	4.843"	10"	0.0004"	2400	6300N
L0006	6MT PRECISION LIVE CENTER	6	2.494"	4.921"	2.953"	2.697"	7.221"	14.252"	0.0004"	1600	10000N

Super-Precision Live Centers Kits

Triple bearing, heavy-duty, high-speed design
All centers are provided with high-precision bearings
One-piece body is made of high-quality forged alloy steel
Hardened to 60 HRC and precisely ground
Bearings are protected by a special steel/elastomer ring
Every set includes: the main body, six inserts and an ejecting wedge
Set comes with a strong metal or plastic case

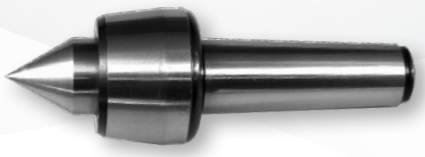


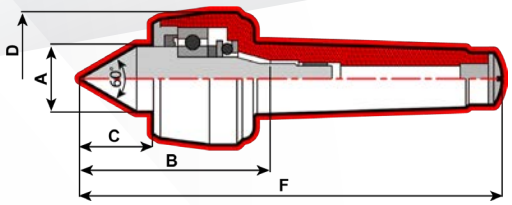


Order No	Description	Morse Taper Size	A	B	C	D	E	F	T.I.R.	Max RPM	Max Load
L0010	2MT PRECISION LIVE CENTER SET	2	0.7"	1.732"	0.787"	1.024"	2.953"	5.512"	0.0004"	5000	1500N
L0008	3MT PRECISION LIVE CENTER SET	3	0.938"	1.969"	1.378"	1.122"	3.03"	6.22"	0.0004"	42000	2000N
L0007	4MT PRECISION LIVE CENTER SET	4	1.231"	2.598"	2.165"	1.378"	3.94"	7.933"	0.0004"	3200	3200N
L0009	5MT PRECISION LIVE CENTER SET	5	1.748"	3.543"	2.756"	1.772"	4.528"	9.685"	0.0004"	2400	6300N

Super-Precision Live Centers

High-precision, light-duty design
One-piece body & spindle made of high-quality forged alloy steel
Hardened to 60 HRC and precisely ground
Front bearings are protected by a special steel/elastomer ring
Front ball bearings support the high-speed rotation with excellent accuracy under medium load
Thrust ball bearings with hardened frame provide excellent rigidity and accuracy
Rear needle bearings fit design and help counteract heat displacement when running

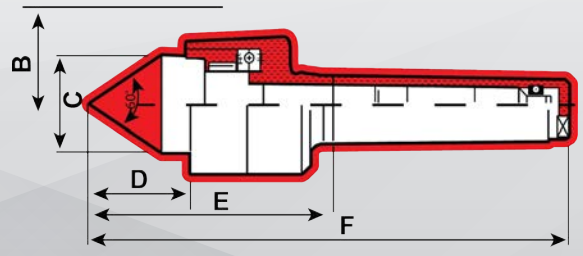




Order No	Description	Morse Taper Size	A	B	C	D	E	F	T.I.R.	Max RPM	Max Load
L0018	1MT SUPER PRECISION LIVE CENTER	1	0.475"	1.339"	0.709"	0.779"	2.402"	4.528"	0.0002"	5000	320N
L0012	2MT SUPER PRECISION LIVE CENTER	2	0.7"	1.772"	0.984"	1.126"	2.543"	5.102"	0.0002"	5000	400N
L0011	3MT SUPER PRECISION LIVE CENTER	3	0.938"	2.047"	1.102"	1.26"	3.117"	6.307"	0.0002"	4500	800N
L0013	4MT SUPER PRECISION LIVE CENTER	4	1.231"	2.362"	1.26"	1.437"	3.551"	7.547"	0.0002"	3500	1250N
L0014	5MT SUPER PRECISION LIVE CENTER	5	1.748"	3.15"	1.772"	2"	4.469"	9.626"	0.0002"	3000	1500N
L0019	6MT SUPER PRECISION LIVE CENTER	6	2.494"	5.118"	2.953"	2.945"	6.749"	13.78"	0.0002"	2500	1800N

Super-Precision High RPM Medium-Duty Live Centers

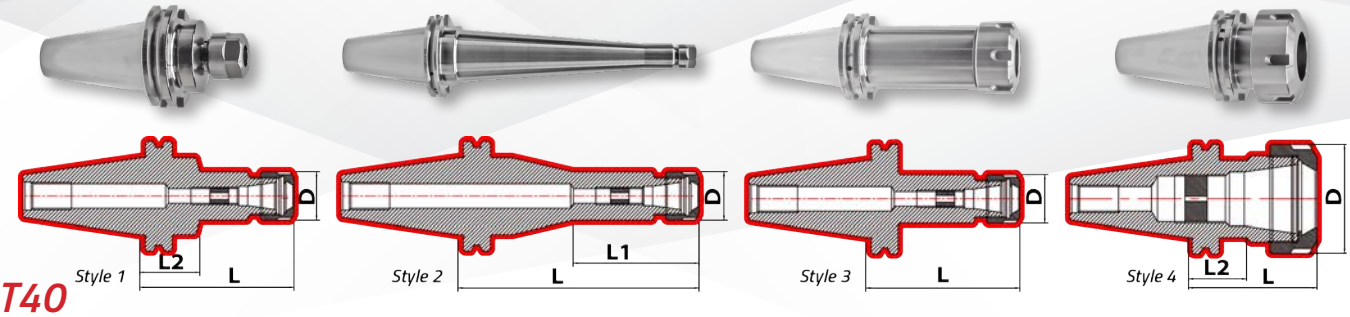
High-precision, high-speed, medium-duty design
Provided with adjustable ultra-precision, high-speed radial bearing
One-piece body & spindle made of high-quality forged alloy steel,
Hardened to 60 HRC and precisely ground.
Front bearings are protected by a special steel/elastomer ring
Perfect for all kinds of machining operations on manual and CNC lathes



Order No.	Description	Morse Taper Size	A	B	C	D	E	F	T.I.R.	Max RPM	Max Load
L0020	2MT SUPER PREC. ADJ. HS LIVE CENTER	2	0.7"	1.772"	0.984"	1.024"	3.15"	5.709"	0.0004"	5000	4200N
L0015	3MT SUPER PREC. ADJ. HS LIVE CENTER	3	0.938"	2.047"	1.102"	1.181"	3.503"	6.693"	0.0004"	4200	2000N
L0016	4MT SUPER PREC. ADJ. HS LIVE CENTER	4	1.231"	2.362"	1.26"	1.366"	4.102"	8.098"	0.0004"	3200	3200N
L0017	5MT SUPER PREC. ADJ. HS LIVE CENTER	5	1.748"	3.031"	1.772"	1.772"	4.843"	10"	0.0004"	2400	6300N
L0021	6MT SUPER PREC. ADJ. HS LIVE CENTER	6	2.494"	4.921"	2.953"	2.697"	7.221"	14.252"	0.0004"	1600	10000N

ER Collet Chucks

Taper-to-Taper Runout < 0.0001" • AD+B coolant through the spindle & flange
CAT40 Balanced G2.5 @ 30,000 RPM / CAT40 Draw Bar Threads: 5/8"-11
CAT50 Balanced G2.5 @25,000 RPM / CAT50 Draw Bar Threads: 1"-8
Hardened to 58-62 HRC • Taper Shank ground to AT3 accuracy (or better)



CAT40

Order No.	Series	Collet Cap	Nut	L	L1	L2	D	Locknut	Wrench	Style
T0325	ER11	0.04"-0.276"	Hex	2.5"	-	1.38"	0.748"	T0090	T0062	1
T0498	ER11	0.04"-0.276"	Hex	3"	-	1.38"	0.748"	T0090	T0062	1
T0322	ER11	0.04"-0.276"	Hex	4"	-	1.38"	0.748"	T0090	T0062	1
T0326	ER11	0.04"-0.276"	Hex	6"	-	1.38"	0.748"	T0090	T0062	1
T0310	ER16	0.04"-0.394"	Hex	2.5"	-	1.38"	1.102"	T0087	T0066	1
T0499	ER16	0.04"-0.394"	Hex	2.76"	-	1.38"	1.102"	T0087	T0066	1
T0500	ER16	0.04"-0.394"	Hex	3"	-	1.38"	1.102"	T0087	T0066	1
T0501	ER16	0.04"-0.394"	Hex	3.5"	-	1.38"	1.102"	T0087	T0066	1
T0317	ER16	0.04"-0.394"	Hex	4"	-	1.38"	1.102"	T0087	T0066	1
T0321	ER16	0.04"-0.394"	Hex	5"	-	1.38"	1.102"	T0087	T0066	1
T0329	ER16	0.04"-0.394"	Hex	6"	-	1.38"	1.102"	T0087	T0066	1
T0327	ER16	0.04"-0.394"	Hex	8"	-	1.38"	1.102"	T0087	T0066	1
T0502	ER16	0.04"-0.394"	Hex	9"	-	1.38"	1.102"	T0087	T0066	1
T0503	ER16	0.04"-0.394"	Hex	10"	-	1.38"	1.102"	T0087	T0066	1
T0314	ER20	0.04"-0.512"	Hex	2.5"	-	1.38"	1.377"	T0088	T0072	1
T0504	ER20	0.04"-0.512"	Hex	2.76"	-	1.38"	1.377"	T0088	T0072	1
T0505	ER20	0.04"-0.512"	Hex	3"	-	1.38"	1.377"	T0088	T0072	1
T0318	ER20	0.04"-0.512"	Hex	4"	-	1.38"	1.377"	T0088	T0072	1
T0320	ER20	0.04"-0.512"	Hex	6"	-	1.38"	1.377"	T0088	T0072	1
T0330	ER20	0.04"-0.512"	Hex	8"	-	1.38"	1.377"	T0088	T0072	1
T0506	ER20	0.04"-0.512"	Hex	9"	-	1.38"	1.377"	T0088	T0072	1
T0507	ER20	0.04"-0.512"	Hex	10"	-	1.38"	1.377"	T0088	T0072	1
T0313	ER25	0.04"-0.63"	Round	2.5"	-	-	1.654"	T0085	T0059	3
T0508	ER25	0.04"-0.63"	Round	2.76"	-	-	1.654"	T0085	T0059	3
T0316	ER25	0.04"-0.63"	Round	4"	-	-	1.654"	T0085	T0059	3
T0323	ER25	0.04"-0.63"	Round	6"	-	-	1.654"	T0085	T0059	3
T0332	ER25	0.04"-0.63"	Round	8"	-	-	1.654"	T0085	T0059	3
T0533	ER32	0.04"-0.810"	Round	2"	-	-	1.97"	T0082	T0054	3
T0510	ER32	0.04"-0.810"	Round	2.36"	-	-	1.97"	T0082	T0054	3
T0353	ER32	0.04"-0.810"	Round	2.5"	-	-	1.97"	T0082	T0054	3
T0309	ER32	0.04"-0.810"	Round	2.75"	-	-	1.97"	T0082	T0054	3
T0511	ER32	0.04"-0.810"	Round	3"	-	-	1.97"	T0082	T0054	3
T0512	ER32	0.04"-0.810"	Round	3.13"	-	-	1.97"	T0082	T0054	3
T0311	ER32	0.04"-0.810"	Round	4"	-	-	1.97"	T0082	T0054	3
T0513	ER32	0.04"-0.810"	Round	5"	-	-	1.97"	T0082	T0054	3
T0319	ER32	0.04"-0.810"	Round	6"	-	-	1.97"	T0082	T0054	3
T0328	ER32	0.04"-0.810"	Round	8"	-	-	1.97"	T0082	T0054	3
T0514	ER32	0.04"-0.810"	Round	9"	-	-	1.97"	T0082	T0054	3

ER Collet Chucks

Continued

CAT40

Order No.	Series	Collet Cap	Nut	L	L1	L2	D	Locknut	Wrench	Style
T0515	ER32	0.04"-0.810"	Round	10"	-	-	1.97"	T0082	T0054	3
T0516	ER40	0.118"-1.024"	Round	2.5"	-	1.38"	2.48"	T0086	T0055	4
T0312	ER40	0.118"-1.024"	Round	3"	-	1.38"	2.48"	T0086	T0055	4
T0517	ER40	0.118"-1.024"	Round	3.15"	-	1.38"	2.48"	T0086	T0055	4
T0518	ER40	0.118"-1.024"	Round	4"	-	1.38"	2.48"	T0086	T0055	4
T0519	ER40	0.118"-1.024"	Round	5"	-	1.38"	2.48"	T0086	T0055	4
T0324	ER40	0.118"-1.024"	Round	6"	-	1.38"	2.48"	T0086	T0055	4
T0331	ER40	0.118"-1.024"	Round	8"	-	1.38"	2.48"	T0086	T0055	4

CAT50

Balanced G2.5 @ 25,000 RPM • CAT50 Draw Bar Threads: 1"- 8

Order No.	Series	Collet Cap	Nut	L	L1	L2	D	Locknut	Wrench	Style
T0339	ER16	0.04"-0.394"	Hex	4"	-	1.38"	1.102"	T0087	T0066	1
T0343	ER16	0.04"-0.394"	Hex	6"	-	1.38"	1.102"	T0087	T0066	1
T0348	ER16	0.04"-0.394"	Hex	8"	-	1.38"	1.102"	T0087	T0066	1
T0520	ER16	0.04"-0.394"	Hex	10"	-	1.38"	1.102"	T0087	T0066	1
T0521	ER16	0.04"-0.394"	Hex	12"	-	1.38"	1.102"	T0087	T0066	2
T0522	ER20	0.04"-0.512"	Hex	2.5"	-	-	1.377"	T0088	T0072	1
T0341	ER20	0.04"-0.512"	Hex	4"	-	1.38"	1.377"	T0088	T0072	1
T0337	ER20	0.04"-0.512"	Hex	6"	-	1.38"	1.377"	T0088	T0072	1
T0347	ER20	0.04"-0.512"	Hex	8"	-	1.38"	1.377"	T0088	T0072	1
T0523	ER20	0.04"-0.512"	Hex	10"	-	1.38"	1.377"	T0088	T0072	1
T0524	ER20	0.04"-0.512"	Hex	12"	-	1.38"	1.377"	T0088	T0072	1
T0525	ER25	0.04"-0.63"	Round	2.5"	-	-	1.654"	T0085	T0059	1
T0342	ER25	0.04"-0.63"	Round	4"	-	1.38"	1.654"	T0085	T0059	1
T0345	ER25	0.04"-0.63"	Round	6"	-	1.38"	1.654"	T0085	T0059	1
T0350	ER25	0.04"-0.63"	Round	8"	-	1.38"	1.654"	T0085	T0059	1
T0526	ER25	0.04"-0.63"	Round	9"	-	1.38"	1.654"	T0085	T0059	1
T0527	ER25	0.04"-0.63"	Round	10"	-	1.38"	1.654"	T0085	T0059	1
T0346	ER32	0.04"-0.810"	Round	1.69"	-	1.38"	1.97"	T0082	T0054	3
T0335	ER32	0.04"-0.810"	Round	4"	-	1.38"	1.97"	T0082	T0054	1
T0336	ER32	0.04"-0.810"	Round	6"	-	1.38"	1.97"	T0082	T0054	1
T0344	ER32	0.04"-0.810"	Round	8"	-	1.38"	1.97"	T0082	T0054	1
T0528	ER32	0.04"-0.810"	Round	10"	-	1.38"	1.97"	T0082	T0054	1
T0351	ER32	0.04"-0.810"	Round	12"	-	1.38"	1.97"	T0082	T0054	1
T0338	ER40	0.118"-1.024"	Round	4"	-	1.38"	2.48"	T0086	T0055	1
T0340	ER40	0.118"-1.025"	Round	6"	-	1.38"	2.48"	T0086	T0055	1
T0349	ER40	0.118"-1.026"	Round	8"	-	1.38"	2.48"	T0086	T0055	1
T0529	ER40	0.118"-1.027"	Round	10"	-	1.38"	2.48"	T0086	T0055	1
T0530	ER50	0.118"-1.024"	Round	4"	-	1.38"	2.48"	T0086	T0055	4
T0531	ER50	0.118"-1.024"	Round	6"	-	1.38"	2.48"	T0086	T0055	4
T0532	ER50	0.118"-1.024"	Round	8"	-	1.38"	2.48"	T0086	T0055	4

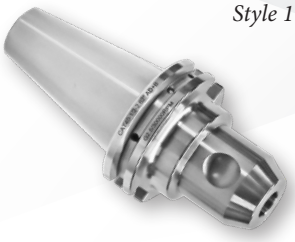
Universal H/V CNC Tool Tightening Fixtures

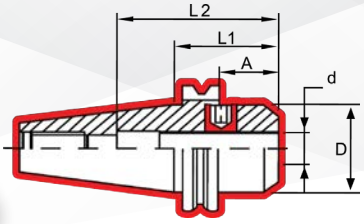
Order No.	Description	Height	Length	Width
T0102	CAT/BT 30 CNC TIGHTENING FIXTURE	5.75"	8.5"	4.0"
T0100	CAT/BT 40 CNC TIGHTENING FIXTURE	8.5"	4.0"	5.75"
T0101	CAT/BT 50 CNC TIGHTENING FIXTURE	7.75"	11.5"	6.25"

End Mill Holders

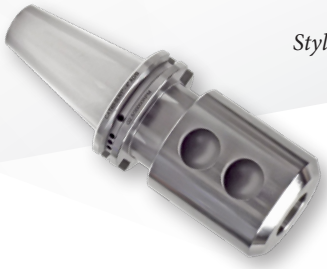
Taper-to-Bore runout < 0.0002"
H5 Bore Tolerance • AD+B Coolant through the spindle & flange
CAT40 balanced G2.5 @ 30,000 RPM / CAT40 Draw Bar Threads: 5/8"-11
Taper Shank ground to AT3 accuracy (or better)

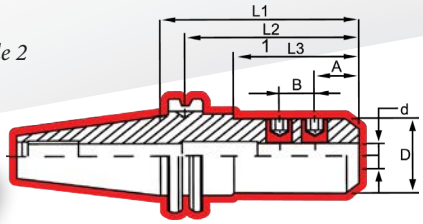
Style 1





Style 2





CAT40

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0187	1/8"	1.38"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0354	1/8"	1.75"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0355	1/8"	2"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0356	1/8"	2.37"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0357	1/8"	2.5"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0358	1/8"	3"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0359	1/8"	4"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0177	1/8"	4.5"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0360	1/8"	5"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0361	1/8"	6"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0185	3/16"	1.38"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0362	3/16"	1.75"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0182	3/16"	2.5"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0363	3/16"	3"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0364	3/16"	4"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0179	3/16"	4.5"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0365	3/16"	4.72"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0197	3/16"	6"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0181	1/4"	1.38"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0366	1/4"	1.75"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0174	1/4"	2.5"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0367	1/4"	3"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0368	1/4"	4"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0369	1/4"	4.72"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0169	1/4"	4.5"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0194	1/4"	6"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0370	1/4"	9"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0189	5/16"	1.38"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0371	5/16"	1.75"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0372	5/16"	2.5"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0373	5/16"	3"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0374	5/16"	4"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0190	5/16"	4.5"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0375	5/16"	4.72"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1

End Mill Holders

Continued

CAT40

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0376	5/16"	6"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0377	5/16"	9"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0178	3/8"	1.38"	1"	-	0.61"	-	5/16"-24	1	5/32"	1
T0378	3/8"	1.75"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0170	3/8"	2.5"	1"	-	0.37"	-	3/8"-24	1	3/16"	1
T0379	3/8"	3"	1"	-	0.37"	-	3/8"-24	1	3/16"	1
T0380	3/8"	4"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0381	3/8"	4.72"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0183	3/8"	4.5"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0382	3/8"	5"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0383	3/8"	6"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0203	3/8"	6.5"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0207	3/8"	8"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0384	3/8"	9"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0196	7/16"	1.75"	1.25"	-	0.875"	-	5/16"-24	1	3/16"	1
T0385	7/16"	2.5"	1.25"	-	0.875"	-	5/16"-24	1	3/16"	1
T0386	7/16"	2.62"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0387	7/16"	4"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0200	7/16"	4.5"	1.25"	-	1.25"	-	5/16"-24	1	5/32"	1
T0388	7/16"	9"	1.25"	-	0.63"	-	5/16"-24	1	5/32"	1
T0173	1/2"	1.75"	1.38"	-	0.875"	-	7/16"-20	1	5/32"	1
T0352	1/2"	2.5"	1.38"	-	0.63"	-	7/16"-20	1	5/32"	1
T0164	1/2"	2.62"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0389	1/2"	3"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0390	1/2"	4"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0172	1/2"	4.62"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0391	1/2"	5"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0392	1/2"	6"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0193	1/2"	6.92"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0202	1/2"	8"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0393	1/2"	9"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0394	9/16"	1.75"	1.5"	2.362"	0.937"	-	7/16"-20	1	7/32"	1
T0395	9/16"	2.62"	1.5"	-	0.937"	-	7/16"-20	1	7/32"	1
T0175	5/8"	1.75"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0396	5/8"	2.75"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0397	5/8"	3"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0171	5/8"	3.75"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0398	5/8"	4"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0399	5/8"	5.5"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0195	5/8"	5.75"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0400	5/8"	6"	1.5"	2.56"	0.937"	-	1/2"-20	1	1/4"	1
T0205	5/8"	8"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0401	5/8"	9"	1.5"	2.362"	0.937"	-	1/2"-20	1	1/4"	1
T0165	3/4"	1.75"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0402	3/4"	3"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0403	3/4"	3.5"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0168	3/4"	3.75"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0404	3/4"	4"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0405	3/4"	5"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0406	3/4"	5.5"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1

End Mill Holders

Continued

CAT40

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0186	3/4"	5.75"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0407	3/4"	6"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0408	3/4"	6.5"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0198	3/4"	8"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0409	3/4"	9"	1.75"	2.61"	0.965"	-	5/8"-18	1	5/16"	1
T0188	7/8"	1.75"	1.75"	2.56"	1.063"	-	5/8"-18	1	5/16"	1
T0410	7/8"	3.5"	1.75"	3.15"	1.063"	-	5/8"-18	1	5/16"	1
T0411	7/8"	3.75"	1.75"	3.15"	1.063"	-	5/8"-18	1	5/16"	1
T0191	7/8"	4"	1.75"	3.15"	1.063"	-	5/8"-18	1	5/16"	1
T0201	7/8"	6"	1.75"	3.15"	1.063"	-	5/8"-18	1	3/8"	1
T0412	7/8"	9"	1.75"	3.15"	1.063"	-	5/8"-18	1	3/8"	1
T0166	1"	1.75"	2.28"	2.323"	0.945"	-	3/4"-16	1	3/8"	1
T0413	1"	2"	2.28"	2.323"	0.945"	-	3/4"-16	1	3/8"	1
T0414	1"	3"	2.28"	2.953"	0.945"	-	3/4"-16	1	3/8"	1
T0180	1"	4"	2.28"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0192	1"	6"	2.28"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0206	1"	8"	2.28"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0415	1"	9"	2.28"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0167	1-1/4"	2"	2.5"	2.323"	1.125"	-	3/4"-16	1	3/8"	1
T0416	1-1/4"	4"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0176	1-1/4"	4.25"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0417	1-1/4"	4.6"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0418	1-1/4"	6"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0204	1-1/4"	6.25"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0208	1-1/4"	8"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0419	1-1/2"	4"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0420	1-1/2"	4.5"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0184	1-1/2"	4.62"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0421	1-1/2"	6"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0199	1-1/2"	6.62"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0209	1-1/2"	8"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2

CAT50 *Balanced G2.5 @ 25,000 RPM • CAT50 Draw Bar Threads: 1" - 8*

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0422	1/8"	2.5"	0.69"	-	0.37"	-	3/16"-24	1	3/32"	1
T0244	3/16"	2.5"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0233	3/16"	4.5"	0.69"	-	0.562"	-	1/4"-28	1	1/8"	1
T0423	1/4"	1.38"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0245	1/4"	2.5"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0424	1/4"	4"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0229	1/4"	4.5"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0239	1/4"	6"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0425	1/4"	6.5"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0426	1/4"	8"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1
T0427	1/4"	10"	0.81"	-	0.63"	-	1/4"-28	1	1/8"	1

End Mill Holders

Taper-to-Bore runout < 0.0002”
H5 Bore Tolerance
AD+B Coolant through the spindle & flange
CAT50 balanced G2.5 @ 25,000 RPM / CAT50 Draw Bar Threads: 1”- 8
Taper Shank ground to AT3 accuracy (or better)

CAT50

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0428	5/16"	1.38"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0429	5/16"	2.5"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0430	5/16"	4"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0231	5/16"	4.5"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0431	5/16"	6"	0.88"	-	0.63"	-	5/16"-24	1	5/32"	1
T0432	3/8"	1.38"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0226	3/8"	2.5"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0433	3/8"	4"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0221	3/8"	4.5"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0434	3/8"	6"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0227	3/8"	6.5"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0248	3/8"	8”	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0435	3/8"	10"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0436	3/8"	14"	1"	-	0.61"	-	3/8"-24	1	3/16"	1
T0247	7/16"	1.75"	1.25"	-	0.71"	-	5/16"-24	1	5/32"	1
T0437	7/16"	2.5"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0438	7/16"	4"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0237	7/16"	4.5"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0439	7/16"	6"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0440	7/16"	8"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0441	7/16"	14"	1.25"	-	0.875"	-	5/16"-24	1	5/32"	1
T0442	1/2"	1.75"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0230	1/2"	2.62"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0443	1/2"	4"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0219	1/2"	4.62"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0444	1/2"	5"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0445	1/2"	6"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0224	1/2"	6.62"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0235	1/2"	8"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0446	1/2"	10"	1.38"	-	0.875"	-	7/16"-20	1	7/32"	1
T0447	1/2"	14"	1.38"	-	0.875"	-	7/16"-20	2	7/32"	2
T0448	9/16"	1.44"	1.5"	-	0.875"	-	7/16"-20	1	7/32"	1
T0449	9/16"	2.62"	1.5"	-	0.875"	-	7/16"-20	1	7/32"	1
T0450	9/16"	3"	1.5"	-	0.875"	-	7/16"-20	1	7/32"	1
T0451	9/16"	6"	1.5"	-	0.875"	-	7/16"-20	1	7/32"	1
T0452	5/8"	1.44"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0453	5/8"	1.75"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0454	5/8"	3"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0220	5/8"	3.75"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0455	5/8"	4"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0222	5/8"	5.75"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0456	5/8"	6"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0457	5/8"	7.5"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0458	5/8"	7.75"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0236	5/8"	8"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1

End Mill Holders

Continued

CAT50

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0459	5/8"	10"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0460	5/8"	14"	1.5"	-	0.937"	-	1/2"-20	1	1/4"	1
T0461	3/4"	1.44"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0462	3/4"	1.62"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0463	3/4"	1.75"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0464	3/4"	3"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0215	3/4"	3.75"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0465	3/4"	4"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0217	3/4"	5.75"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0466	3/4"	6"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0467	3/4"	7.75"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0228	3/4"	8"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0468	3/4"	14"	1.75"	-	0.965"	-	5/8"-18	1	5/16"	1
T0469	7/8"	1.75"	1.75"	2.56"	1.063"	-	5/8"-18	1	5/16"	1
T0470	7/8"	3.75"	1.75"	2.56"	1.06"	-	5/8"-18	1	5/16"	1
T0234	7/8"	4"	1.75"	2.56"	1.06"	-	5/8"-18	1	5/16"	1
T0471	7/8"	5.75"	1.75"	2.56"	1.06"	-	5/8"-18	1	5/16"	1
T0238	7/8"	6"	1.75"	2.56"	1.06"	-	5/8"-18	1	5/16"	1
T0472	7/8"	7.75"	1.75"	2.56"	1.06"	-	5/8"-18	1	5/16"	1
T0473	7/8"	8"	1.75"	2.56"	1.06"	-	5/8"-18	1	5/16"	1
T0474	1"	1.62"	2.48"	2.323"	0.945"	-	3/4"-16	1	3/8"	1
T0475	1"	2"	2.48"	2.323"	0.945"	-	3/4"-16	1	3/8"	1
T0476	1"	2.62"	2.48"	2.323"	0.945"	-	3/4"-16	1	3/8"	1
T0214	1"	4"	2.48"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0218	1"	6"	2.48"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0240	1"	8"	2.48"	2.953"	1.125"	1"	3/4"-16	2	3/8"	2
T0477	1"	14"	2.48"	2.953"	1.127v"	1"	3/4"-16	2	3/8"	2
T0478	1-1/4"	2"	2.5"	2.5"	1.125"	-	3/4"-16	1	3/8"	1
T0479	1-1/4"	2.62"	2.5"	2.5"	1.125"	-	3/4"-16	1	3/8"	1
T0480	1-1/4"	4"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0216	1-1/4"	4.25"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0481	1-1/4"	4.6"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0482	1-1/4"	6"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0225	1-1/4"	6.25"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0241	1-1/4"	8"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0484	1-1/2"	2"	2.5"	2.5"	1.125"	1"	3/4"-16	1	3/8"	1
T0485	1-1/2"	2.25"	2.5"	2.5"	1.125"	1"	3/4"-16	1	3/8"	1
T0486	1-1/2"	2.62"	2.5"	2.5"	1.125"	1"	3/4"-16	1	3/8"	1
T0487	1-1/2"	4"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0223	1-1/2"	4.62"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0488	1-1/2"	6"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0246	1-1/2"	6.62"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0489	1-1/2"	7"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0242	1-1/2"	8"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2
T0490	1-1/2"	9"	2.5"	3"	1.125"	1"	3/4"-16	2	3/8"	2

End Mill Holders

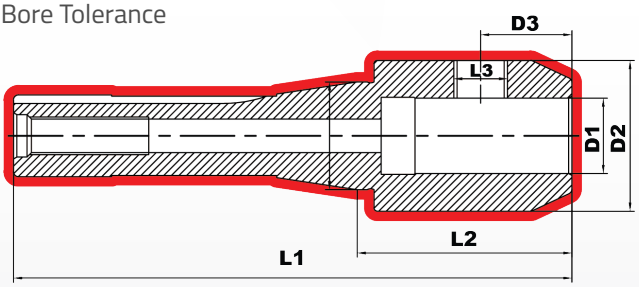
Continued

CAT50

Order No.	d	L1	D	L2	A	B	Clamp Screw Size	# of Clamp Screw	Allen Key Size	Style
T0491	2"	3.63"	3.75"	3"	1.335"	-	3/4"-16	1	3/8"	1
T0492	2"	5.37"	3.75"	3.74"	1.335"	1.41"	3/4"-16	2	3/8"	2
T0232	2"	5.62"	3.75"	3.74"	1.335"	1.41"	3/4"-16	2	3/8"	2
T0493	2"	6"	3.75"	3.74"	1.335"	1.41"	3/4"-16	2	3/8"	2
T0494	2"	7.62"	3.75"	3.74"	1.335"	1.41"	3/4"-16	2	3/8"	2
T0249	2"	8"	3.75"	3.74"	1.335"	1.41"	3/4"-16	2	3/8"	2
T0497	2-1/2"	6.5"	4.921"	3.66"	1.575"	1.575"	3/4"-16	2	3/8"	2

R8 Shank End Mill Holders

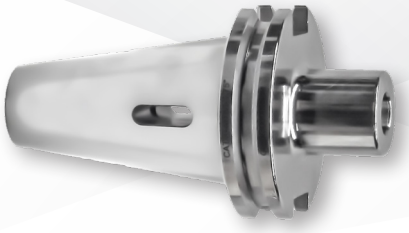
R8 shank T.I.R. < 0.0001"
Draw bar thread 7/16" - 20
H7 Bore Tolerance

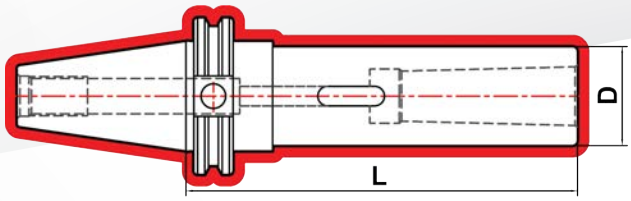


Order No.	D1	D2	D3	L1	L2	L3
T0307	3/16"	0.69"	M6	5.2"	1.2"	7/16"-20
T0305	3/8"	1"	M10	5.2"	1.2"	7/16"-20
T0303	1/2"	1.378"	M12	6"	2"	7/16"-20
T0306	5/8"	1.5"	M12	6"	2"	7/16"-20
T0304	3/4"	1.75"	M16	6"	2"	7/16"-20
T0308	7/8"	1.75"	M16	6.5"	2.5"	7/16"-20
T0302	1"	1.89"	M16	7"	2.99"	7/16"-20

Morse Taper Adapters

Coolant through the Spindle
Taper Shank ground to AT3 accuracy (or better)
MT - CAT Form A
CAT40 Balanced G2.5 @ 30,000 RPM / Draw Bar Threads: 5/8"-11
CAT50 Balanced G2.5 @20,000 RPM / Draw Bar Threads: 1"-8





CAT40

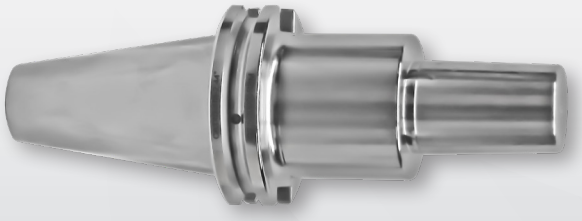
Order No.	Taper size	D	L
T0110	1	0.984"	2.205"
T0109	2	1.260"	2.638"
T0108	3	1.575"	3.307"
T0107	4	1.89"	4.213"

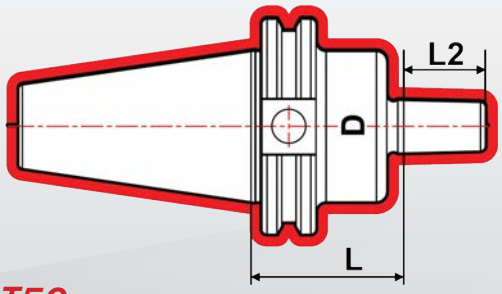
CAT50

Order No.	Taper size	D	L
T0113	2	1.260"	2.638"
T0114	3	1.575"	3.307"
T0111	4	1.89"	4.213"
T0112	5	2.48"	5.236"

Jacobs Taper Adapters

Designed to use with Keyless Jacobs Chucks
Non-coolant
Taper Shank ground to AT3 accuracy (or better)
CAT40 - Balanced G2.5 @ 30,000 RPM / Draw Bar Threads: 5/8" - 11
CAT50 Balanced to 20,000 RPM / Draw Bar Threads: 1" - 8





CAT40

Order No.	Taper size	D	L	L2
T0116	JT2	1.75"	1.57"	0.875"
T0117	JT2	1.75"	2.44"	0.875"
T0115	JT3	1.75"	1.57"	1.21"
T0118	JT3	1.75"	2.78"	1.21"
T0119	JT33	1.75"	1.57"	1.015"
T0122	JT33	1.75"	2.56"	1.015"
T0121	JT4	1.75"	1.57"	1.665"
T0123	JT4	1.75"	2.44"	1.665"
T0120	JT6	1.75"	1.57"	1.025"
T0124	JT6	1.75"	2.44"	1.025"

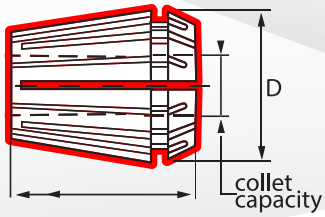
CAT50

Order No.	Taper size	D	L	L2
T0130	JT2	2.75"	1.57"	0.875"
T0127	JT3	2.75"	1.57"	1.21"
T0125	JT3	2.75"	2.78"	1.21"
T0131	JT33	2.75"	1.57"	1.015"
T0126	JT33	2.75"	2.56"	1.015"
T0128	JT4	2.75"	1.57"	1.6"
T0133	JT4	2.75"	3.25"	1.6"
T0129	JT5	2.75"	1.57"	1.86"
T0132	JT6	2.75"	1.57"	0.975"

High-Precision Collets

(0.0003" T.I.R.)

Inch - Fractional
Collet accuracy: 0.0003" - 0.0004" T.I.R.
Wide clamping ranges: 0.02" - 0.039" collapsibility
Made of high-quality case hardened steel
for long operating life and elasticity of collet



Inch

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CS001	ER11	1/16"	.0625-.0225	1.588-1.00
CS002	ER11	3/32"	.0938-.0538	2.383-1.382
CS003	ER11	1/8"	.1250-.0850	3.175-2.174
CS004	ER11	5/32"	.1563-.1163	3.970-2.969
CS005	ER11	3/16"	.1875-.1475	4.763-3.762
CS006	ER11	7/32"	.2188-.1788	5.558-4.557
CS007	ER11	1/4"	.2500-.2100	6.350-5.349
CS008	ER16	1/16"	.0625-.0225	1.588-1.080
CS009	ER16	3/32"	.0938-.0538	2.383-1.382
CS010	ER16	1/8"	.1250-.0850	3.175-2.174
CS011	ER16	5/32"	.1563-.1163	3.970-2.969
CS012	ER16	3/16"	.1875-.1475	4.763-3.762
CS013	ER16	7/32"	.2188-.1788	5.558-4.557
CS014	ER16	1/4"	.2500-.2100	6.350-5.349
CS015	ER16	9/32"	.2813-.2413	7.145-6.144
CS016	ER16	5/16"	.3125-.2725	7.938-6.937
CS017	ER16	11/32"	.3438-.3038	8733-7.732
CS018	ER16	3/8"	.3750-.3350	9.525-8.524
CS019	ER16	13/32"	.4063-.3663	10.320-9.319
CS020	ER20	3/32"	.0938-.0538	2.383-1.382
CS021	ER20	1/8"	.1250-.0850	3.175-2.174
CS022	ER20	5/32"	.1563-.1163	3.970-2.969
CS023	ER20	3/16"	.1875-.1475	4.763-3.762
CS024	ER20	7/32"	.2188-.1788	5.558-4.557
CS025	ER20	1/4"	.2500-.2100	6.350-5.349
CS026	ER20	9/32"	.2813-.2413	7.145-6.144
CS027	ER20	5/16"	.3125-.2725	7.938-6.937
CS028	ER20	11/32"	.3438-.3038	8733-7.732
CS029	ER20	3/8"	.3750-.3350	9.525-8.524
CS030	ER20	13/32"	.4063-.3663	10.320-9.319
CS031	ER20	7/16"	.4375-.3975	11.113-10.112
CS032	ER20	15/32"	.4688-.4288	11.908-10.907
CS033	ER20	1/2"	.5000-.4600	12.700-11.836
CS034	ER25	1/16"	.0625-.0225	1.588-1.080
CS035	ER25	3/32"	.0938-.0538	2.383-1.382
CS036	ER25	1/8"	.1250-.0850	3.175-2.174
CS037	ER25	5/32"	.1563-.1163	3.970-2.969
CS038	ER25	3/16"	.1875-.1475	4.763-3.762
CS039	ER25	7/32"	.2188-.1788	5.558-4.557
CS040	ER25	1/4"	.2500-.2100	6.350-5.349
CS041	ER25	9/32"	.2813-.2413	7.145-6.144
CS042	ER25	5/16"	.3125-.2725	7.938-6.937
CS043	ER25	11/32"	.3438-.3038	8733-7.732
CS044	ER25	3/8"	.3750-.3350	9.525-8.524
CS045	ER25	13/32"	.4063-.3663	10.320-9.319

High-Precision Collets

(0.0003" T.I.R.)

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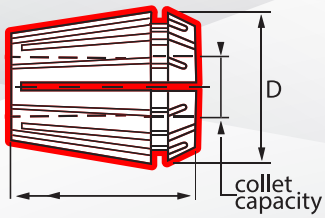

Inch

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CS046	ER25	7/16"	.4375-.3975	11.113-10.112
CS047	ER25	15/32"	.4688-.4288	11.908-10.907
CS048	ER25	1/2"	.5000-.4600	12.700-11.836
CS049	ER25	17/32"	.5313-.4913	13.495-12.494
CS050	ER25	9/16"	.5625-.5225	14.288-13.287
CS051	ER25	19/32"	.5938-.5538	15.083-14.082
CS052	ER25	5/8"	.6250-.5850	15.875-14.874
CS053	ER32	1/8"	.1250-.0850	3.175-2.174
CS054	ER32	5/32"	.1563-.1163	3.970-2.969
CS055	ER32	3/16"	.1875-.1475	4.763-3.762
CS056	ER32	7/32"	.2188-.1788	5.558-4.557
CS057	ER32	1/4"	.2500-.2100	6.350-5.349
CS058	ER32	9/32"	.2813-.2413	7.145-6.144
CS059	ER32	5/16"	.3125-.2725	7.938 -6.937
CS060	ER32	11/32"	.3438-.3038	8733-7.732
CS061	ER32	3/8"	.3750-.3350	9.525-8.524
CS062	ER32	13/32"	.4063-.3663	10.320-9.319
CS063	ER32	7/16"	.4375-.3975	11.113-10.112
CS064	ER32	15/32"	.4688-.4288	11.908-10.907
CS065	ER32	1/2"	.5000-.4600	12.700-11.836
CS066	ER32	17/32"	.5313-.4913	13.495-12.494
CS067	ER32	9/16"	.5625-.5225	14.288-13.287
CS068	ER32	19/32"	.5938-.5538	15.083-14.082
CS069	ER32	5/8"	.6250-.5850	15.875-14.874
CS070	ER32	21/32"	.6563-.6163	16.670-15.669
CS071	ER32	11/16"	.6875-.6475	17.463-16.462
CS072	ER32	23/32"	.7188-.6788	18.258-17.257
CS073	ER32	3/4"	.7500-.7413	19.050-18.049
CS074	ER32	25/32"	.7813-.7413	19.845-18.844
CS075	ER32	13/16"	.8125-.7725	20.638-19.637
CS076	ER40	1/8"	.1250-.0850	3.175-2.174
CS077	ER40	5/32"	.1563-.1163	3.970-2.969
CS078	ER40	3/16"	.1875-.1475	4.763-3.762
CS079	ER40	7/32"	.2188-.1788	5.558-4.557
CS080	ER40	1/4"	.2500-.2100	6.350-5.349
CS081	ER40	9/32"	.2813-.2413	7.145-6.144
CS082	ER40	5/16"	.3125-.2725	7.938-6.937
CS083	ER40	11/32"	.3438-.3038	8733-7.732
CS084	ER40	3/8"	.3750-.3350	9.525-8.524
CS085	ER40	13/32"	.4063-.3663	10.320-9.319
CS086	ER40	7/16"	.4375-.3975	11.113-10.112
CS087	ER40	15/32"	.4688-.4288	11.908-10.907
CS088	ER40	1/2"	.5000-.4600	12.700-11.836
CS089	ER40	17/32"	.5313-.4913	13.495-12.494

High-Precision Collets

(0.0003" T.I.R.)

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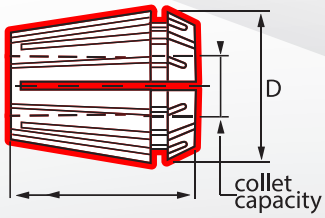


Inch

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CS090	ER40	9/16"	.5625-.5225	14.288-13.287
CS091	ER40	19/32"	.5938-.5538	15.083-14.082
CS092	ER40	5/8"	.6250-.5850	15.875-14.874
CS093	ER40	21/32"	.6563-.6163	16.670-15.669
CS094	ER40	11/16"	.6875-.6475	17.463-16.462
CS095	ER40	23/32"	.7188-.6788	18.258-17.257
CS096	ER40	3/4"	.7500-.7413	19.050-18.049
CS097	ER40	25/32"	.7813-.7413	19.845-18.844
CS098	ER40	13/16"	.8125-.7725	20.638-19.637
CS099	ER40	27/32"	.8438-.8038	21.433-20.432
CS100	ER40	7/8"	.8750-.8350	22.225 -21.224
CS101	ER40	29/32"	.9063-.8663	23.020-22.013
CS102	ER40	15/16"	.9375-.8975	23.813-22.812
CS103	ER40	31/32"	.9688-.9288	24.608-23.607
CS104	ER40	1"	1.000-.9600	25.400-24.399

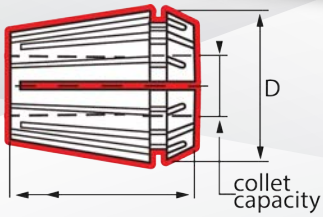
Inch Sets

Order No.	Series	Number of Pieces	Increments Inch	Set Includes inch sizes
CS206	ER11	7	1/32"	1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4
CS208	ER16	12	1/32"	1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32
CS210	ER20	8	1/16"	3/32, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
CS212	ER25	10	1/16"	3/32, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8
CS214	ER32	12	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16
CS216	ER40	15	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1

High-Precision Collets

(0.0003" T.I.R.)

Metric - Millimeters
Collet accuracy: 0.0003" - 0.0004" T.I.R.
Wide clamping ranges: 0.02" - 0.039" collapsibility
Made of high-quality case hardened steel
for long operating life and elasticity of collet



Metric

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CS105	ER11	1.0mm	.3940-.0197	1.0-0.5
CS106	ER11	1.5mm	.0590-.0394	1.5-1.0
CS107	ER11	2.0mm	.0787-.0390	2.0-1.0
CS108	ER11	2.5mm	.0984-.0590	2.5-1.5
CS109	ER11	3.0mm	.1181-.0787	3.0-2.0
CS110	ER11	3.5mm	.1378-.0980	3.5-2.5
CS111	ER11	4.0mm	.1575-.1181	4.0 -3.0
CS112	ER11	4.5mm	.1772-.1575	4.5 -3.5
CS113	ER11	5.0mm	.1969-.1575	5.0 -4.0
CS114	ER11	5.5mm	.2165-.1770	5.5 -4.5
CS115	ER11	6.0mm	.2362-.1969	6.0-5.0
CS116	ER11	6.5mm	.2559-.2170	6.5-5.5
CS117	ER11	7.0mm	.2756-.2362	7.0-6.0
CS118	ER16	1.0mm	.3940-.0197	1.0-0.5
CS119	ER16	1.5mm	.0590-.0394	1.5-1.0
CS120	ER16	2.0mm	.0787-.0390	2.0-1.0
CS121	ER16	2.5mm	.0984-.0590	2.5-1.5
CS122	ER16	3.0mm	.1181-.0787	3.0-2.0
CS123	ER16	3.5mm	.1378-.0980	3.5-2.5
CS124	ER16	4.0mm	.1575-.1181	4.0-3.0
CS125	ER16	4.5mm	.1772-.1575	4.5-3.5
CS126	ER16	5.0mm	.1969-.1575	5.0-4.0
CS127	ER16	5.5mm	.2165-.1770	5.5-4.5
CS128	ER16	6.0mm	.2362-.1969	6.0-5.0
CS129	ER16	6.5mm	.2559-.2170	6.5-5.5
CS130	ER16	7.0mm	.2756-.2362	7.0-6.0
CS131	ER16	7.5mm	.2953-.2559	7.5-6.5
CS132	ER16	8.0mm	.3150-.2756	8.0-7.0
CS133	ER16	8.5mm	.3346-.2953	8.5-7.5
CS134	ER16	9.0mm	.3543-.3150	9.0-8.0
CS135	ER16	9.5mm	.3740-.3346	9.5-8.5
CS136	ER16	10.0mm	.3937-.3543	10.0-9.0
CS137	ER20	1.0mm	.3940-.0197	1.0-0.5
CS138	ER20	2.0mm	.0787-.0390	2.0-1.0
CS139	ER20	3.0mm	.1181-.0787	3.0-2.0
CS140	ER20	4.0mm	.1575-.1181	4.0-3.0
CS141	ER20	5.0mm	.1969-.1575	5.0-4.0
CS142	ER20	6.0mm	.2362-.1969	6.0-5.0
CS143	ER20	7.0mm	.2756-.2362	7.0-6.0
CS144	ER20	8.0mm	.3150-.2756	8.0-7.0
CS145	ER20	9.0mm	.3543-.3150	9.0-8.0
CS146	ER20	10.0mm	.3937-.3543	10.0-9.0
CS147	ER20	11.0mm	.4330-.3543	11.0-10.0
CS148	ER20	12.0mm	.4724-.4330	12.0-11.0
CS149	ER20	13.0mm	.5118-.4724	13.0-12.0

High-Precision Collets

(0.0003" T.I.R.)

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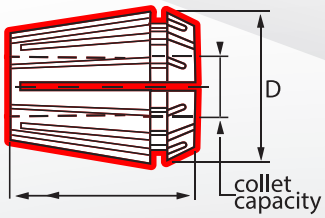

Metric

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CS150	ER25	2.0mm	.0787-.0390	2.0-1.0
CS151	ER25	3.0mm	.1181-.0787	3.0-2.0
CS152	ER25	4.0mm	.1575-.1181	4.0-3.0
CS153	ER25	5.0mm	.1969-.1575	5.0-4.0
CS154	ER25	6.0mm	.2362-.1969	6.0-5.0
CS155	ER25	7.0mm	.2756-.2362	7.0-6.0
CS156	ER25	8.0mm	.3150-.2756	8.0-7.0
CS157	ER25	9.0mm	.3543-.3150	9.0-8.0
CS158	ER25	10.0mm	.3937-.3543	10.0-9.0
CS159	ER25	11.0mm	.4330-.3543	11.0-10.0
CS160	ER25	12.0mm	.4724-.4330	12.0-11.0
CS161	ER25	13.0mm	.5118-.4724	13.0-12.0
CS162	ER25	14.0mm	.5512-.5118	14.0-13.0
CS163	ER25	15.0mm	.5906-.5512	15.0-14.0
CS164	ER25	16.0mm	.6299-.5906	16.0-15.0
CS165	ER32	3.0mm	.1181-.0787	3.0-2.0
CS166	ER32	4.0mm	.1575-.1181	4.0-3.0
CS167	ER32	5.0mm	.1969-.1575	5.0-4.0
CS168	ER32	6.0mm	.2362-.1969	6.0-5.0
CS169	ER32	7.0mm	.2756-.2362	7.0-6.0
CS170	ER32	8.0mm	.3150-.2756	8.0-7.0
CS171	ER32	9.0mm	.3543-.3150	9.0-8.0
CS172	ER32	10.0mm	.3937-.3543	10.0-9.0
CS173	ER32	11.0mm	.4330-.3543	11.0-10.0
CS174	ER32	12.0mm	.4724-.4330	12.0-11.0
CS175	ER32	13.0mm	.5118-.4724	13.0-12.0
CS176	ER32	14.0mm	.5512-.5118	14.0-13.0
CS177	ER32	15.0mm	.5906-.5512	15.0-14.0
CS178	ER32	16.0mm	.6299-.5906	16.0-15.0
CS179	ER32	17.0mm	.6693-.6299	17.0-16.0
CS180	ER32	18.0mm	.7087-.6693	18.0-17.0
CS181	ER32	19.0mm	.7480-.7087	19.0-18.0
CS182	ER32	20.0mm	.7874-.7480	20.0-19.0
CS183	ER40	4.0mm	.1575-.1181	4.0-3.0
CS184	ER40	5.0mm	.1969-.1575	5.0 - 4.0
CS185	ER40	6.0mm	.2362-.1969	6.0-5.0
CS186	ER40	7.0mm	.2756-.2362	7.0-6.0
CS187	ER40	8.0mm	.3150-.2756	8.0-7.0
CS188	ER40	9.0mm	.3543-.3150	9.0-8.0
CS189	ER40	10.0mm	.3937-.3543	10.0-9.0
CS190	ER40	11.0mm	.4330-.3543	11.0-10.0
CS191	ER40	12.0mm	.4724-.4330	12.0-11.0
CS192	ER40	13.0mm	.5118-.4724	13.0-12.0
CS193	ER40	14.0mm	.5512-.5118	14.0-13.0
CS194	ER40	15.0mm	.5906-.5512	15.0-14.0

High-Precision Collets

(0.0003" T.I.R.)

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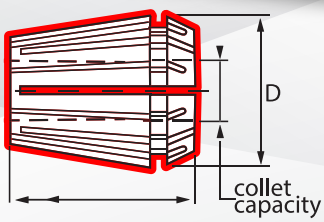


Metric

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CS195	ER40	16.0mm	.6299-.5906	16.0-15.0
CS196	ER40	17.0mm	.6693-.6299	17.0-16.0
CS197	ER40	18.0mm	.7087-.6693	18.0-17.0
CS198	ER40	19.0mm	.7480-.7087	19.0 -18.0
CS199	ER40	20.0mm	.7874-.7480	20.0 -19.0
CS200	ER40	21.0mm	.8270-.7874	21.0 -20.0
CS201	ER40	22.0mm	.8661-.8270	22.0 -21.0
CS202	ER40	23.0mm	.9055-.8661	23.0 -22.0
CS203	ER40	24.0mm	.9449-.9055	24.0 -23.0
CS204	ER40	25.0mm	.9843-.9449	25.0 -24.0
CS205	ER40	26.0mm	1.0236-.9843	26.0 -25.0

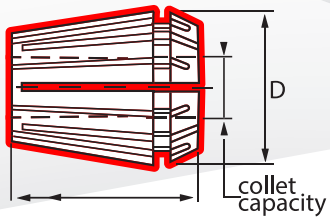
Metric Sets

Order No.	Series	Number of Pieces	Increments-mm	Set Includes mm sizes
CS207	ER11	13	.50mm	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7
CS209	ER16	10	1.0mm	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
CS211	ER20	12	1.0mm	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
CS213	ER25	15	1.0mm	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
CS215	ER32	18	1.0mm	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
CS217	ER40	23	1.0mm	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26

Ultra-High Precision Collets

(0.0001" T.I.R.)

Inch - Fractional
Collet accuracy: 0.0001"- .0002"
Wide clamping ranges: 0.02"-0.039" collapsibility
Precision ground
Made of high-quality case hardened steel for long operating life and elasticity of collet



Inch

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CP001	ER16	1/16"	0.0625-0.0225	1.588-1.080
CP002	ER16	3/32"	0.0938-0.0538	2.383-1.382
CP003	ER16	1/8"	0.1250-0.0850	3.175-2.174
CP004	ER16	5/32"	0.1563-0.1163	3.970-2.969
CP005	ER16	3/16"	0.1875-0.1475	4.763-3.762
CP006	ER16	7/32"	0.2188-0.1788	5.558-4.557
CP007	ER16	1/4"	0.2500-0.2100	6.350-5.349
CP008	ER16	9/32"	0.2813-0.2413	7.145-6.144
CP009	ER16	5/16"	0.3125-0.2725	7.938-6.937
CP010	ER16	11/32"	0.3438-0.3038	8.733-7.732
CP011	ER16	3/8"	0.3750-0.3350	9.525-8.524
CP012	ER16	13/32"	0.4063-0.3663	10.320-9.319
CP013	ER20	3/32"	0.0938-0.0538	2.383-1.382
CP014	ER20	1/8"	0.1250-0.0850	3.175-2.174
CP015	ER20	5/32"	0.1563-0.1163	3.970-2.969
CP016	ER20	3/16"	0.1875-0.1475	4.763-3.762
CP017	ER20	7/32"	0.2188-0.1788	5.558-4.557
CP018	ER20	1/4"	0.2500-0.2100	6.350-5.349
CP019	ER20	9/32"	0.2813-0.2413	7.145-6.144
CP020	ER20	5/16"	0.3125-0.2725	7.938-6.937
CP021	ER20	11/32"	0.3438-0.3038	8.733-7.732
CP022	ER20	3/8"	0.3750-0.3350	9.525-8.524
CP023	ER20	13/32"	0.4063-0.3663	10.320-9.319
CP024	ER20	7/16"	0.4375-0.3975	11.113-10.112
CP025	ER20	15/32"	0.4688-0.4288	11.908-10.907
CP026	ER20	1/2"	0.5000-0.4600	12.700-11.836
CP027	ER25	1/16"	0.0625-0.0225	1.588-1.080
CP028	ER25	3/32"	0.0938-0.0538	2.383-1.382
CP029	ER25	1/8"	0.1250-0.0850	3.175-2.174
CP030	ER25	5/32"	0.1563-0.1163	3.970-2.969
CP031	ER25	3/16"	0.1875-0.1475	4.763-3.762
CP032	ER25	7/32"	0.2188-0.1788	5.558-4.557
CP033	ER25	1/4"	0.2500-0.2100	6.350-5.349
CP034	ER25	9/32"	0.2813-0.2413	7.145-6.144
CP035	ER25	5/16"	0.3125-0.2725	7.938-6.937
CP036	ER25	11/32"	0.3438-0.3038	8.733-7.732
CP037	ER25	3/8"	0.3750-0.3350	9.525-8.524
CP038	ER25	13/32"	0.4063-0.3663	10.320-9.319
CP039	ER25	7/16"	0.4375-0.3975	11.113 -10.112
CP040	ER25	15/32"	0.4688-0.4288	11.908 -10.907
CP041	ER25	1/2"	0.5000-0.4600	12.700-11.836
CP042	ER25	17/32"	0.5313-0.4913	13.495-12.494

Ultra-High Precision Collets

(0.0001" T.I.R.)

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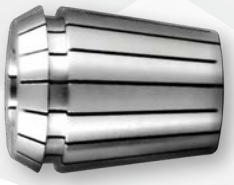

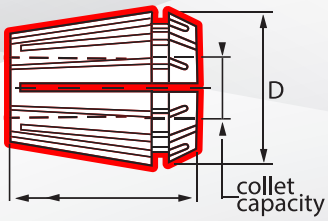

Inch

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CP043	ER25	9/16"	0.5625-0.5225	14.288-13.287
CP044	ER25	19/32"	0.5938-0.5538	15.083-14.082
CP045	ER25	5/8"	0.6250-0.5850	15.875-14.874
CP046	ER32	1/8"	0.1250-0.0850	3.175-2.174
CP047	ER32	5/32"	0.1563-0.1163	3.970-2.969
CP048	ER32	3/16"	0.1875-0.1475	4.763-3.762
CP049	ER32	7/32"	0.2188-0.1788	5.558-4.557
CP050	ER32	1/4"	0.2500-0.2100	6.350-5.349
CP051	ER32	9/32"	0.2813-0.2413	7.145-6.144
CP052	ER32	5/16"	0.3125-0.2725	7.938-6.937
CP053	ER32	11/32"	0.3438-0.3038	8.733-7.732
CP054	ER32	3/8"	0.3750-0.3350	9.525-8.524
CP055	ER32	13/32"	0.4063-0.3663	10.320-9.319
CP056	ER32	7/16"	0.4375-0.3975	11.113- 10.112
CP057	ER32	15/32"	0.4688-0.4288	11.908 -10.907
CP058	ER32	1/2"	0.5000-0.4600	12.700-11.836
CP059	ER32	17/32"	0.5313-0.4913	13.495-12.494
CP060	ER32	9/16"	0.5625-0.5225	14.288-13.287
CP061	ER32	19/32"	0.5938-0.5538	15.083-14.082
CP062	ER32	5/8"	0.6250-0.5850	15.875-14.874
CP063	ER32	21/32"	0.6563-0.6163	16.670-15.669
CP064	ER32	11/16"	0.6875-0.6475	17.463-16.462
CP065	ER32	23/32"	0.7188-0.6788	18.258-17.257
CP066	ER32	3/4"	0.7500-0.7100	19.050-18.049
CP067	ER32	25/32"	0.7813-0.7413	19.845-18.844
CP068	ER32	13/16"	0.8125-0.7725	20.638-19.637
CP069	ER40	1/8"	0.1250-0.0850	3.175-2.174
CP070	ER40	5/32"	0.1563-0.1163	3.970-2.969
CP071	ER40	3/16"	0.1875-0.1475	4.763-3.762
CP072	ER40	7/32"	0.2188-0.1788	5.558-4.557
CP073	ER40	1/4"	0.2500-0.2100	6.350-5.349
CP074	ER40	9/32"	0.2813-0.2413	7.145-6.144
CP075	ER40	5/16"	0.3125-0.2725	7.938-6.937
CP076	ER40	11/32"	0.3438-0.3038	8.733-7.732
CP077	ER40	3/8"	0.3750-0.3350	9.525-8.524
CP078	ER40	13/32"	0.4063-0.3663	10.320-9.319
CP079	ER40	7/16"	0.4375-0.3975	11.113-10.112
CP080	ER40	15/32"	0.4688-0.4288	11.908-10.907
CP081	ER40	1/2"	0.5000-0.4600	12.700-11.836
CP082	ER40	17/32"	0.5313-0.4913	13.495-12.494
CP083	ER40	9/16"	0.5625-0.5225	14.288-13.287
CP084	ER40	19/32"	0.5938-0.5538	15.083-14.082
CP085	ER40	5/8"	0.6250-0.5850	15.875-14.874
CP086	ER40	21/32"	0.6563-0.6163	16.670-15.669

Ultra-High Precision Collets

(0.0001" T.I.R.)

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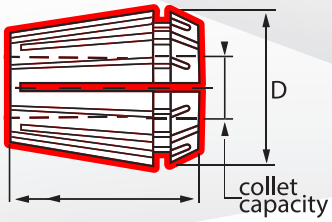


Inch

Order No	Series	Nominal Size	Capacity Max-Min inch	Capacity Max-Min mm
CP087	ER40	11/16"	0.6875-0.6475	17.463-16.462
CP088	ER40	23/32"	0.7188-0.6788	18.258-17.257
CP089	ER40	3/4"	0.7500-0.7100	19.050-18.049
CP090	ER40	25/32"	0.7813-0.7413	19.845-18.844
CP091	ER40	13/16"	0.8125-0.7725	20.638-19.637
CP092	ER40	27/32"	0.8438-0.8038	21.433-20.432
CP093	ER40	7/8"	0.8750-0.8350	22.225-21.224
CP094	ER40	29/32"	0.9063-0.8663	23.020-22.013
CP095	ER40	15/16"	0.9375-0.8975	23.813-22.812
CP096	ER40	13/32"	0.9688-0.9288	24.608-23.607
CP097	ER40	1"	1.0000-0.9600	25.400-24.399

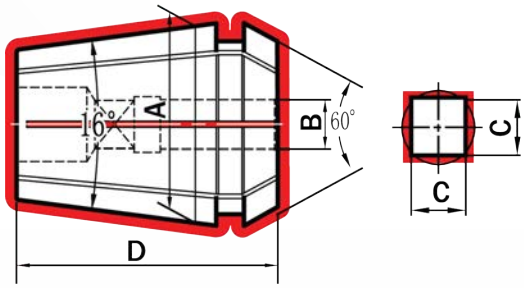
Inch Sets

Order No.	Series	Number of Pieces	Increments-Inch	Set Includes inch sizes
CP098	ER16	12	1/32"	1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32
CP099	ER20	8	1/16"	3/32, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
CP100	ER25	10	1/16"	3/32, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8
CP101	ER32	12	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16
CP102	ER40	15	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1

Rigid Tap Collets

(0.0003" T.I.R.)

Collet accuracy: 0.0003" - 0.0004" T.I.R.
Special design locks tap square in slots
Shanks ASME B94.9 -1999
Collet holes made for tool shanks with H6 tolerance
Collets do not "collapse" to the same degree as standard ER collets
"Slotted" ER tap collets are designed to clamp both the round and square shank on the tap, providing greater rigidity and better tapping performance
Made of high-quality case hardened steel for long operating life and elasticity of collet



Order No.	Series	Tap Size Inch	Metric ANSI Shank Tap	Tap Shank Diameter	Drive Square Size
CT001	ER16	#6	M1.6-M3.5	.141"	.110"
CT002	ER16	#8	M4	.168"	.131"
CT003	ER16	#10	M4.5, M5	.194"	.152"
CT004	ER16	#12	-	.220"	.165"
CT005	ER16	1/4"	M6, M6.3	.225"	.191"
CT006	ER20	#6	M1.6-M3.5	.141"	.110"
CT007	ER20	#8	M4	.168"	.131"
CT008	ER20	#10	M4.5, M5	.194"	.152"
CT009	ER20	#12	-	.220"	.165"
CT010	ER20	1/4"	M6, M6.3	.225"	.191"
CT011	ER20	5/16"	M7, M8	.318"	.238"
CT012	ER20	3/8"	M10	.381"	.286"
CT013	ER20	7/16"	M11	.323"	.242"
CT014	ER20	1/2"	M12, M12.5	.367"	.275"
CT015	ER25	#6	M1.6-M3.5	.141"	.110"
CT016	ER25	#8	M4	.168"	.131"
CT017	ER25	#10	M4.5, M5	.194"	.152"
CT018	ER25	#12	-	.220"	.165"
CT019	ER25	1/8" NPT	-	.437"	.328"
CT020	ER25	1/4"	M6, M6.3	.255"	.191"
CT021	ER25	5/16"	M7, M8	.318"	.238"
CT022	ER25	3/8"	M10	.381"	.286"
CT023	ER25	7/16"	M11	.323"	.242"
CT024	ER25	1/2"	M12, M12.5	.367"	.275"
CT025	ER25	9/16"	M14	.429"	.322"
CT026	ER25	5/8"	M16	.480"	.360"
CT027	ER32	#6	M1.6-M3.5	.141"	.110"
CT028	ER32	#8	M4	.168"	.131"
CT029	ER32	#10	M4.5, M5	.194"	.152"

Rigid Tap Collets

(0.0003" T.I.R.)

Continued

Order No.	Series	Tap Size Inch	Metric ANSI Shank Tap	Tap Shank Diameter	Drive Square Size
CT030	ER32	#12	-	.220"	.165"
CT031	ER32	1/8" NPT	-	.437"	.328"
CT032	ER32	1/4"NPT	-	.562"	.421"
CT033	ER32	1/4"	M6, M6.3	.255"	.191"
CT034	ER32	5/16"	M7, M8	.318"	.238"
CT035	ER32	3/8"	M10	.381"	.286"
CT036	ER32	7/16"	M11	.323"	.242"
CT037	ER32	1/2"	M12, M12.5	.367"	.275"
CT038	ER32	9/16"	M14	.429"	.322"
CT039	ER32	5/8"	M16	.480"	.360"
CT040	ER32	11/16"	M18	.542"	.406"
CT041	ER32	3/4"	-	.590"	.442"
CT042	ER32	13/16"	M20	.652"	.489"
CT043	ER40	#6	M1.6-M3.5	.141"	.110"
CT044	ER40	#8	M4	.168"	.131"
CT045	ER40	#10	M4.5, M5	.194"	.152"
CT046	ER40	#12	-	.220"	.165"
CT047	ER40	1/8" NPT	-	.437"	.328"
CT048	ER40	1/4" NPT	-	.562"	.421"
CT049	ER40	1/4"	M6, M6.3	.255"	.191"
CT050	ER40	5/16"	M7, M8	.318"	.238"
CT051	ER40	3/8" NPT	-	.700"	.531"
CT052	ER40	3/8"	M10	.381"	.286"
CT053	ER40	7/16"	M11	.323"	.242"
CT054	ER40	1/2" NPT	-	.687"	.515"
CT055	ER40	1/2"	M12, M12.5	.367"	.275"
CT056	ER40	9/16"	M14	.429"	.322"
CT057	ER40	5/8"	M16	.480"	.360"
CT058	ER40	11/16"	M18	.542"	.542"
CT059	ER40	3/4"	-	.590"	.442"
CT060	ER40	13/16"	M20	.562"	.489"
CT061	ER40	7/8"	-	.697"	.523"
CT062	ER40	15/16"	M24	.760"	.570"
CT063	ER40	1"	M25	.800"	.600"

Steel Sealed Collets

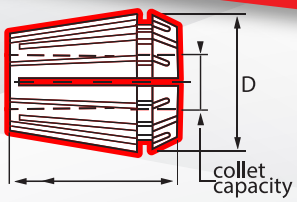
(0.0003" T.I.R.)

Inch - Fractional

Collet Accuracy : 0.0003"-0.0004" T.I.R

For optimal collet performance, use tools with shank diameter equal to the collet nominal size • Coolant allowable pressure: 1,500 PSI

Wide clamping ranges: 0.118"-0.236" • Made of high-quality case hardened steel



Inch

Order No.	Series	Nominal Size
CSS01	ER16	1/8"
CSS02	ER16	5/32"
CSS03	ER16	3/16"
CSS04	ER16	7/32"
CSS05	ER16	1/4"
CSS06	ER16	9/32"
CSS07	ER16	5/16"
CSS08	ER16	11/32"
CSS09	ER16	3/8"
CSS10	ER16	13/32"
CSS26	ER20	1/8"
CSS27	ER20	5/32"
CSS28	ER20	3/16"
CSS29	ER20	7/32"
CSS30	ER20	1/4"
CSS31	ER20	9/32"
CSS32	ER20	5/16"
CSS33	ER20	11/32"
CSS34	ER20	3/8"
CSS35	ER20	13/32"
CSS36	ER20	7/16"
CSS37	ER20	15/32"
CSS38	ER20	1/2"
CSS50	ER25	1/8"
CSS51	ER25	5/32"
CSS52	ER25	3/16"
CSS53	ER25	7/32"
CSS54	ER25	1/4"
CSS55	ER25	9/32"
CSS56	ER25	5/16"

Order No.	Series	Nominal Size
CSS57	ER25	11/32"
CSS58	ER25	3/8"
CSS59	ER25	13/32"
CSS60	ER25	7/16"
CSS61	ER25	15/32"
CSS62	ER25	1/2"
CSS63	ER25	17/32"
CSS64	ER25	9/16"
CSS65	ER25	19/32"
CSS66	ER25	5/8"
CSS81	ER32	1/8"
CSS82	ER32	5/32"
CSS83	ER32	3/16"
CSS84	ER32	7/32"
CSS85	ER32	1/4"
CSS86	ER32	9/32"
CSS87	ER32	5/16"
CSS88	ER32	11/32"
CSS89	ER32	3/8"
CSS90	ER32	13/32"
CSS91	ER32	7/16"
CSS92	ER32	15/32"
CSS93	ER32	1/2"
CSS94	ER32	17/32"
CSS95	ER32	9/16"
CSS96	ER32	19/32"
CSS97	ER32	5/8"
CSS98	ER32	21/32"
CSS99	ER32	11/16"
CSS100	ER32	23/32"
CSS101	ER32	3/4"

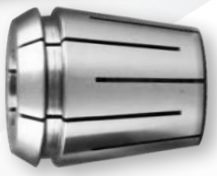
Order No.	Series	Nominal Size
CSS102	ER32	25/32"
CSS103	ER32	13/16"
CSS122	ER40	1/8"
CSS123	ER40	5/32"
CSS124	ER40	3/16"
CSS125	ER40	7/32"
CSS126	ER40	1/4"
CSS127	ER40	9/32"
CSS128	ER40	5/16"
CSS129	ER40	11/32"
CSS130	ER40	3/8"
CSS131	ER40	13/32"
CSS132	ER40	7/16"
CSS133	ER40	15/32"
CSS134	ER40	1/2"
CSS135	ER40	17/32"
CSS136	ER40	9/16"
CSS137	ER40	19/32"
CSS138	ER40	5/8"
CSS139	ER40	21/32"
CSS140	ER40	11/16"
CSS141	ER40	23/32"
CSS142	ER40	3/4"
CSS143	ER40	25/32"
CSS144	ER40	13/16"
CSS145	ER40	27/32"
CSS146	ER40	7/8"
CSS147	ER40	29/32"
CSS148	ER40	15/16"
CSS149	ER40	31/32"
CSS150	ER40	1"

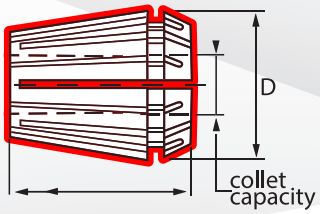
Inch Sets

Order No.	Series	Number of Pieces	Increments Inch	Set Includes inch sizes
CSS174	ER16	10	1/32"	1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32
CSS175	ER20	7	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
CSS176	ER25	9	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8
CSS177	ER32	12	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16
CSS178	ER32	18	1/32"	7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2, 17/32, 9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4
CSS179	ER40	15	1/16"	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1

Steel Sealed Collets

(0.0003" T.I.R.)





Metric - Millimeter
Collet Accuracy : 0.0003"-0.0004" T.I.R
For optimal collet performance, use tools with shank diameter
equal to the collet nominal size • Coolant allowable pressure: 1,500 PSI
Wide clamping ranges: 0.118"-0.236" • Made of high-quality case hardened steel

Metric

Order No.	Series	Nominal Size
CSS11	ER16	3.0mm
CSS12	ER16	3.5mm
CSS13	ER16	4.0mm
CSS14	ER16	4.5mm
CSS15	ER16	5.0mm
CSS16	ER16	5.5mm
CSS17	ER16	6.0mm
CSS18	ER16	6.5mm
CSS19	ER16	7.0mm
CSS20	ER16	7.5mm
CSS21	ER16	8.0mm
CSS22	ER16	8.5mm
CSS23	ER16	9.0mm
CSS24	ER16	9.5mm
CSS25	ER16	10.0mm
CSS39	ER20	3.0mm
CSS40	ER20	4.0mm
CSS41	ER20	5.0mm
CSS42	ER20	6.0mm
CSS43	ER20	7.0mm
CSS44	ER20	8.0mm
CSS45	ER20	9.0mm
CSS46	ER20	10.0mm
CSS47	ER20	11.0mm
CSS48	ER20	12.0mm
CSS49	ER20	13.0mm

Order No.	Series	Nominal Size
CSS67	ER25	3.0mm
CSS68	ER25	4.0mm
CSS69	ER25	5.0mm
CSS70	ER25	6.0mm
CSS71	ER25	7.0mm
CSS72	ER25	8.0mm
CSS73	ER25	9.0mm
CSS74	ER25	10.0mm
CSS75	ER25	11.0mm
CSS76	ER25	12.0mm
CSS77	ER25	13.0mm
CSS78	ER25	14.0mm
CSS79	ER25	15.0mm
CSS80	ER25	16.0mm
CSS104	ER32	3.0mm
CSS105	ER32	4.0mm
CSS106	ER32	5.0mm
CSS107	ER32	6.0mm
CSS108	ER32	7.0mm
CSS109	ER32	8.0mm
CSS110	ER32	9.0mm
CSS111	ER32	10.0mm
CSS112	ER32	11.0mm
CSS113	ER32	12.0mm
CSS114	ER32	13.0mm
CSS115	ER32	14.0mm
CSS116	ER32	15.0mm

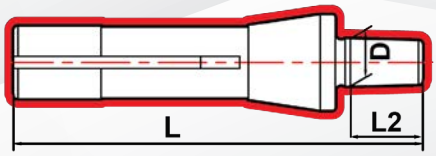
Order No.	Series	Nominal Size
CSS117	ER32	16.0mm
CSS118	ER32	17.0mm
CSS119	ER32	18.0mm
CSS120	ER32	19.0mm
CSS121	ER32	20.0mm
CSS151	ER40	4.0mm
CSS152	ER40	5.0mm
CSS153	ER40	6.0mm
CSS154	ER40	7.0mm
CSS155	ER40	8.0mm
CSS156	ER40	9.0mm
CSS157	ER40	10.0mm
CSS158	ER40	11.0mm
CSS159	ER40	12.0mm
CSS160	ER40	13.0mm
CSS161	ER40	14.0mm
CSS162	ER40	15.0mm
CSS163	ER40	16.0mm
CSS164	ER40	17.0mm
CSS165	ER40	18.0mm
CSS166	ER40	19.0mm
CSS167	ER40	20.0mm
CSS168	ER40	21.0mm
CSS169	ER40	22.0mm
CSS170	ER40	23.0mm
CSS171	ER40	24.0mm
CSS172	ER40	25.0mm
CSS173	ER40	26.0 mm

Metric Sets

Order No.	Series	Number of Pieces	Increments mm	Set Includes mm sizes
CSS180	ER16	8	1.00mm	3, 4, 5, 6, 7, 8, 9, 10
CSS181	ER20	11	1.00mm	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
CSS182	ER25	14	1.00mm	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
CSS183	ER32	18	1.00mm	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
CSS184	ER40	23	1.00mm	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26

R8 Shank Drill Chuck Arbors

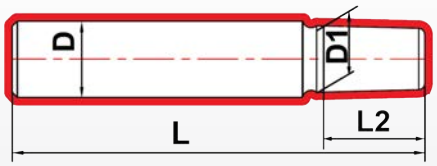
Shank to taper runout < 0.0001" • Made of heat treated carbon steel



Order No.	Shank Size	Jacobs Taper Size	L	D
A0054	R8	1JT	4.80"	0.384"
A0051	R8	2JT	5.04"	0.559"
A0052	R8	33JT	5.2"	0.624"
A0049	R8	3JT	5.39"	0.858"
A0053	R8	4JT	5.83"	1.124"
A0050	R8	6JT	5.39"	0.676"

Straight Shank Drill Chuck Arbors

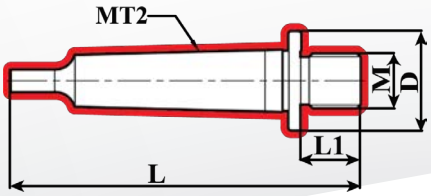
Shank to taper runout < 0.0001" • Made of heat treated carbon steel • Through coolant capable



Order No.	Description	Shank Diameter D	JT Size	L	L2	D1	D2
A0031	1/2" TO JT0 SS DRILL CHUCK ARBOR	1/2"	0JT	3.09"	0.46"	0.25"	0.228"
A0029	1/2" TO JT1 SS DRILL CHUCK ARBOR	1/2"	1JT	3.31"	0.63"	0.384"	0.333"
A0028	1/2" TO JT2 SS DRILL CHUCK ARBOR	1/2"	2JT	3.54"	0.9"	0.559"	0.488"
A0034	1/2" TO JT33 SS DRILL CHUCK ARBOR	1/2"	33JT	3.66"	1.025"	0.624"	0.561"
A0035	1/2" TO JT3 SS DRILL CHUCK ARBOR	1/2"	3JT	3.66"	1.225"	0.811"	0.746"
A0048	1/2" TO JT4 SS DRILL CHUCK ARBOR	1/2"	4JT	4.31"	1.695"	1.124"	1.037"
A0043	1/2" TO JT6 SS DRILL CHUCK ARBOR	1/2"	6JT	3.66"	1.025"	0.676"	0.624"
A0046	5/8" TO JT1 SS DRILL CHUCK ARBOR	5/8"	1JT	3.31"	0.645"	0.384"	0.333"
A0045	5/8" TO JT2 SS DRILL CHUCK ARBOR	5/8"	2JT	3.54"	0.875"	0.559"	0.488"
A0039	5/8" TO JT33 SS DRILL CHUCK ARBOR	5/8"	33JT	3.66"	1"	0.624"	0.561"
A0044	5/8" TO JT3 SS DRILL CHUCK ARBOR	5/8"	3JT	3.88"	1.217"	0.811"	0.746"
A0037	5/8" TO JT6 SS DRILL CHUCK ARBOR	5/8"	6JT	3.66"	1.027"	0.676"	0.624"
A0036	3/4" TO JT2 SS DRILL CHUCK ARBOR	3/4"	2JT	3.54"	0.91"	0.559"	0.488"
A0033	3/4" TO JT33 SS DRILL CHUCK ARBOR	3/4"	33JT	3.66"	1.005"	0.624"	0.561"
A0030	3/4" TO JT3 SS DRILL CHUCK ARBOR	3/4"	3JT	3.88"	1.265"	0.811"	0.746"
A0047	3/4" TO JT4 SS DRILL CHUCK ARBOR	3/4"	4JT	4.31"	1.702"	1.124"	1.037"
A0032	3/4" TO JT6 SS DRILL CHUCK ARBOR	3/4"	6JT	3.66"	1.025"	0.676"	0.624"
A0041	1" TO JT33 SS DRILL CHUCK ARBOR	1"	33JT	3.66"	0.985"	0.624"	0.561"
A0038	1" TO JT3 SS DRILL CHUCK ARBOR	1"	3JT	3.88"	1.205"	0.811"	0.746"
A0042	1" TO JT4 SS DRILL CHUCK ARBOR	1"	4JT	4.31"	1.69"	1.124"	1.037"
A0040	1" TO JT6 SS DRILL CHUCK ARBOR	1"	6JT	3.66"	0.988"	0.676"	0.624"

Morse Taper Drill Chuck Arbor *Threaded*

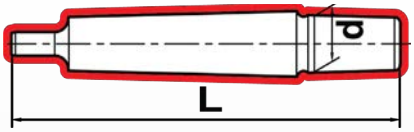
Shank to threaded pilot runout < 0.0001" • Made of heat treated carbon steel



Order No	MT Shank Size	L Inch	L1 Inch	D	M Thread Size
A0056	2	3.819"	0.531"	0.944"	3/8"-24
A0055	2	3.937"	0.610"	1.062"	1/2"-20
A0057	2	4.055"	0.689"	1.141"	5/8"-16

Morse Taper Drill Chuck Arbors *with Tang*

Shank to taper runout < 0.0001" • Made of heat treated carbon steel



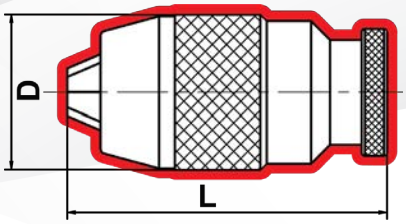
Order No.	MT Shank Size	Jacobs Taper Size	L	L2	D	D2
A0024	1	0JT	3.11"	0.45"	0.25"	0.228"
A0022	1	1JT	3.346"	0.65"	0.384"	0.333"
A0020	1	2JT	3.543"	0.9"	0.559"	0.488"
A0018	1	33JT	3.700"	1.08"	0.624"	0.561"
A0026	1	6JT	3.701"	1.062"	0.676"	0.624"
A0027	2	0JT	3.701"	0.465"	0.25"	0.228"
A0023	2	1JT	3.937"	0.715"	0.384"	0.333"
A0010	2	2JT	4.134"	0.875"	0.559"	0.488"
A0006	2	33JT	4.252"	1.025"	0.624"	0.561"
A0003	2	3JT	4.488"	1.35"	0.811"	0.746"
A0021	2	4JT	4.921"	1.723"	1.124"	1.037"
A0012	2	6JT	4.252"	1"	0.676"	0.624"
A0025	3	1JT	4.646"	0.65"	0.384"	0.333"
A0008	3	2JT	4.882"	0.85"	0.559"	0.488"
A0005	3	33JT	5"	1.025"	0.624"	0.561"
A0001	3	3JT	5.236"	1.2"	0.811"	0.746"
A0009	3	4JT	5.669"	1.695"	1.124"	1.037"
A0017	3	5JT	5.866"	1.938"	1.413"	1.316"
A0013	3	6JT	5"	1.05"	0.676"	0.624"
A0015	4	2JT	5.866"	0.925"	0.559"	0.488"
A0019	4	33JT	5.984"	1.035"	0.624"	0.561"
A0002	4	3JT	6.22"	1.325"	0.811"	0.746"
A0004	4	4JT	6.654"	1.7"	1.124"	1.037"
A0016	4	5JT	6.850"	1.875"	1.413"	1.316"
A0011	4	6JT	5.984"	1.065"	0.676"	0.624"
A0007	5	3JT	7.480"	1.285"	0.811"	0.746"
A0014	5	4JT	7.913"	1.7"	1.124"	1.037"

High-Precision Industrial Keyless Drill Chucks

10,000 RPM

Nickel coated • Self-tightening • Heavy-duty

High-precision +/-0.0003" - 0.0006" runout • Heat treated and precision ground to very tight tolerances



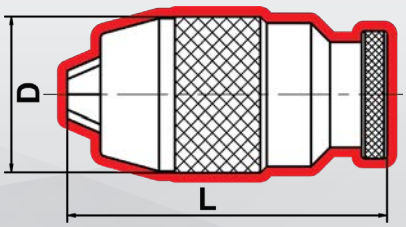
Order No.	Capacity Inch	Capacity Metric	Taper Size	Runout	D	L
D0042	1/64"-1/4"	0.2mm-6mm	JT1	0.003"	1.339"	2.780"
D0038	1/64"-5/16"	0.2mm-8mm	JT2	0.003"	1.535"	3.165"
D0043	1/64"-3/8"	0.2mm-8mm	JT2	0.003"	1.732"	3.551"
D0044	1/64"-3/8"	0.2mm-10mm	JT33	0.003"	1.732"	3.551"
D0034	1/64"-1/2"	0.2mm-10mm	JT2	0.003"	1.929"	3.551"
D0037	1/64"-1/2"	0.2mm-13mm	JT33	0.003"	1.929"	3.961"
D0039	1/64"-1/2"	0.2mm-13mm	JT6	0.003"	1.929"	3.961"
D0040	1/64"-5/8"	0.2mm-16mm	JT6	0.003"	2.126"	4.417"
D0035	1/64"-3/4"	0.2mm-20mm	JT3	0.003"	2.323"	5.177"

High-Precision Industrial Keyless Drill Chucks

4,000 RPM

Self-tightening • Heavy-duty

High-precision +/- 0.0003" - 0.0006" • Heat treated and precision ground to very tight tolerances

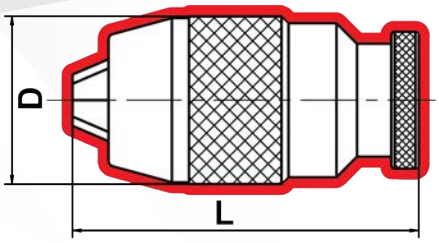


Order No.	Capacity Inch	Capacity Metric	Taper Size	Runout	D	L
D0026	1/64"-1/4"	0.2mm- 6mm	JT1	0.003"	1.339"	2.780"
D0027	1/64"-3/8"	0.2mm-10mm	JT2	0.003"	1.732"	3.551"
D0032	1/64"-3/8"	0.2mm-10mm	JT33	0.003"	1.732"	3.551"
D0028	1/64"-1/2"	0.2mm-13mm	JT2	0.003"	1.929"	3.961"
D0029	1/64"-1/2"	0.2mm-13mm	JT33	0.003"	1.929"	3.961"
D0030	1/64"-1/2"	0.2mm-13mm	JT6	0.004"	1.929"	3.961"
D0031	1/64"-5/8"	0.2mm-16mm	JT6	0.004"	2.126"	4.417"
D0033	1/64"-3/4"	0.2mm-20mm	JT3	0.006"	2.323"	5.177"

Standard-Precision Industrial Keyless Drill Chucks

4,000 RPM

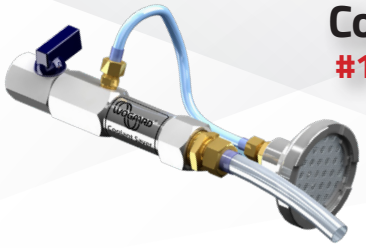
Self-tightening
High-precision +/- 0.005" - 0.006" runout
Heat treated and precision ground to very tight tolerances



Order No.	Capacity Inch	Capacity Metric	Taper Size	Run Out	D	L
D0023	1/64"-1/4"	0.2mm- 6mm	JT1	0.005"	1.339"	2.780"
D0024	1/64"-3/8"	0.2mm-10mm	JT2	0.004"	1.732"	3.551"
D0022	1/64"-1/2"	0.2mm-13mm	JT2	0.005"	1.929"	3.961"
D0021	1/64"-1/2"	0.2mm-13mm	JT6	0.005"	1.929"	3.961"
D0019	1/64"-1/2"	0.2mm-13mm	JT33	0.005"	1.929"	3.961"
D0020	1/64"-5/8"	0.2mm-16mm	JT6	0.005"	2.126"	4.417"
D0025	1/64"-3/4"	0.2mm-20mm	JT3	0.006"	2.323"	5.177"

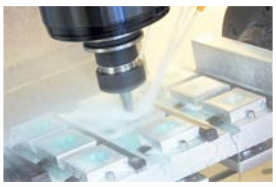
Coolant Saver
Cut the cost of cutting fluid by up to 50%

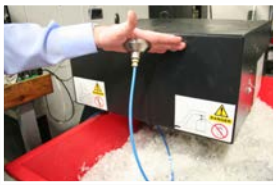
The Wogaard Coolant Saver collects the cutting fluid that is normally wasted through the machine tool's automatic chip conveyor. The cutting fluid is reclaimed for the chip-container and returned to the machine tool's main tank for re-use.



Coolant Saver
#144-1000

- **Save up to 50% on cutting fluid**
- **Save up to 90% on fluid waste cost**
- **Save time & money on fluid handling**





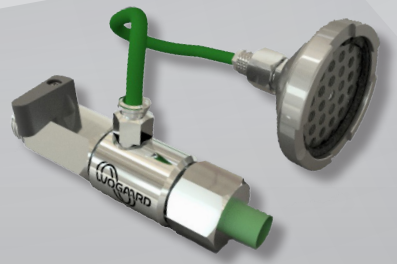
Compact and easy to install Easy to install and virtually maintenance free. It is driven by the machine's onboard coolant pump, so no external energy source.

Savings Save up to 90% on the cost of waste coolant disposal. Furthermore, it saves the considerable time spent by employees handling the cutting fluids. The chip-containers are dry when emptied, which prevents any spillage.

Increasing cost? Considering the long term developments in the price levels of oil, water, energy and disposal, it pays to invest in a better utilization of cutting fluids. The instability of many oil producing nations can cause sudden and significant changes to the cost of oil-based products, including cutting oils and coolants.

Oil Saver

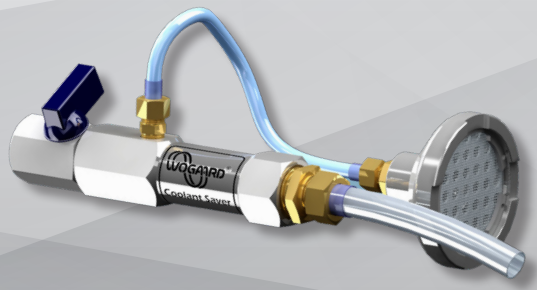
Similar in operation to the coolant saver • Powered by machine on-board pumps
Minimum amount flow through Venturi to achieve suction • Designed to vacuum
High Viscosity oil up to 32cs with low rated pumps (e.g. sliding head)
Check-Valve on vacuum to ensure no loss • Minimum maintenance • Easy clean out mechanism if small debris in oil from sliding head

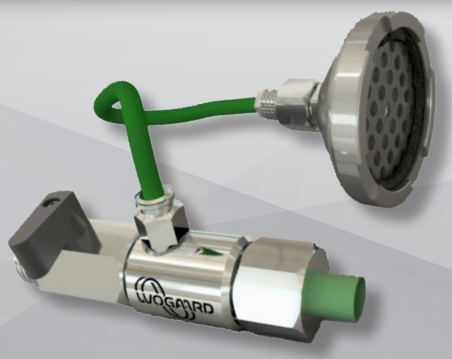


Oil Saver
#145-1000

VERTICAL & HORIZONTAL INSTALLATION

Vertical sump pipe would be in downwards direction

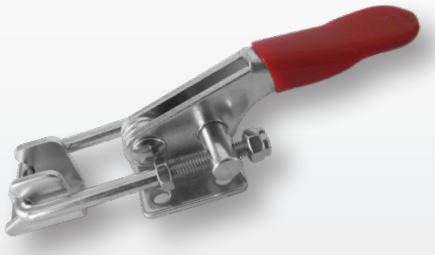




VERTICAL TOGGLE CLAMPS 33

HORIZONTAL TOGGLE CLAMPS 39

LATCH TYPE TOGGLE CLAMPS 43



PUSH/PULL TOGGLE CLAMPS 47

Vertical Clamps

High-quality carbon steel • Stainless steel models available • Hardened steel bushings
100lbs - 1200lbs • Low-profile, t-handle options • Smooth vertical action
Ergonomic handle • 100% USA quality control

Model	Competitor	Description
17040	201-USS	100LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP STAINLESS STEEL
50540	201-U	100LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50560	201-UB	100LB U-BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
17000	202-USS	200LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP STAINLESS STEEL
50420	202-T	200LB SOLID BAR FLANGE BASE VERTICAL T-HANDLE HOLD-DOWN CLAMP
50440	202-UB	200LB U-BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50460	202-B	200LB FIXED SPINDLE STRAIGHT HANDLE VERTICAL HOLD-DOWN CLAMP
50480	202-TU	200LB FIXED SPINDLE FLANGE BASE T-HANDLE VERTICAL HOLD-DOWN CLAMP
50500	202	200LB FIXBAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50520	202-U	200LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50140	317-U	225LB U-BAR DOUBLE FLANGE BASE VERTICAL/HORIZONTAL HOLD-DOWN CLAMP
17060	207-USS	500LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP STAINLESS STEEL
50240	207-ULB	500LB LONG U-BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50260	207-LB	500LB SOLID LONG BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50280	207-L	500LB SOLID LONG BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50300	207-S	500LB SOLID BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50320	207-SB	500LB SOLID BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50340	207-UB	500LB U-BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50380	207-U	500LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50400	207-TU	500LB T-HANDLE U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50360	207-UL	500LB LONG U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50180	210-TU	600LB U-BAR FLANGE BASE VERTICAL T HANDLE HOLD-DOWN CLAMP
50120	210-UB	750LB U-BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50160	210-S	750LB SOLID BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50200	210-SB	750LB SOLID BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50220	210-U	750LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50040	247-SB	1000LB SOLID BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP BOLT RETAINER INCLUDED. DOES NOT INCLUDE SPINDLE ASSEMBLY OR FLANGED WASHERS. MUST BE WELDED.
50060	247-S	1000LB SOLID BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP BOLT RETAINER INCLUDED. DOES NOT INCLUDE SPINDLE ASSEMBLY OR FLANGED WASHERS. MUST BE WELDED.
50080	247-UB	1000LB U-BAR STRAIGHT BASE VERTICAL HOLD-DOWN CLAMP
50100	247-U	1000LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP
50000	267-S	1200LB SOLID BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP BOLT RETAINER INCLUDED. DOES NOT INCLUDE SPINDLE ASSEMBLY OR FLANGED WASHERS. MUST BE WELDED.
50020	267-U	1200LB U-BAR FLANGE BASE VERTICAL HOLD-DOWN CLAMP

Vertical Accessories

Model	Accessory 1	Description	Accessory 2	Description
17040	70150	M5 X 1.49 HEX Full Thread / Stainless Steel	70172	Flanged Washer #10 (2Pack) 0.20" ID X 0.56" OD / Stainless Steel
50540	70187	M10 X 1.38 Round Neoprene Cap		
50560	70187	M10 X 1.38 Round Neoprene Cap		
17000	70195	M6 X 1.74 Full Thread / Stainless Steel	70175	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD / Stainless Steel
50420	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
50440	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
50460	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
50480	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
50500	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated		
50520	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
50140	70153	M8 X 2.5 Flat Bonded Neoprene Cap / Full Thread	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
17060	70257	3/8-16 x 2.8" Neoprene Tip Stainless Steel Spindle Accessory	70177	Flanged Washer 5/16" (2Pack) 0.33" ID X 0.88" OD / Stainless Steel
50240	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
50260	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70223	5/16"-18 X 1.25" Bolt Retainer for Solid Bar Clamp
50280	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70223	5/16"-18 X 1.25" Bolt Retainer for Solid Bar Clamp
50300	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70223	5/16"-18 X 1.25" Bolt Retainer for Solid Bar Clamp
50320	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70223	5/16"-18 X 1.25" Bolt Retainer for Solid Bar Clamp
50340	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26"ID X 0.69" OD / Zinc Plated
50380	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD / Zinc Plated
50400	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD / Zinc Plated
50360	70160	M8 X 2.48" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26"ID X 0.69" OD / Zinc Plated
50180	70157	M10 X 3.5" Flat Bonded Neoprene Cap / Full Thread	70166	Flanged Washer 9.5MM or 3/8" (2Pack) .41"ID X 1" OD / Zinc Plated
50120	70157	M10 X 3.5" Flat Bonded Neoprene Cap / Full Thread	70166	Flanged Washer 9.5MM or 3/8" (2Pack) .41"ID X 1" OD / Zinc Plated
50160	70207	M10 X 3.00 HEX / Full Thread Zinc Plated		
50200	70239	3/8" - .75" X 1.50" Bolt Retainer for Solid Bar Clamp		
50220	70157	M10 X 3.5" Flat Bonded Neoprene Cap Full Thread	70166	Flanged Washer 9.5MM or 3/8" (2Pack) .41"ID X 1" OD / Zinc Plated
50040	70225	1/2" - .88 X 1.49 Bolt Retainer for Solid Bar Clamp		
50060	70225	1/2" - .88 X 1.49 Bolt Retainer for Solid Bar Clamp		
50080	70152	M12 X 3.94 Flat Bonded Neoprene Cap Full Thread	70162	Flanged Washer M12 or 1/2" (2Pack) 1.26" ID X .69" OD / Zinc Plated
50100	70152	M12 X 3.94" Flat Bonded Neoprene Cap Full Thread	70162	Flanged Washer M12 or 1/2" (2Pack) 1.26" ID X .69" OD / Zinc Plated
50000	70235	5/8" X 1.88 Bolt Retainer for Solid Bar Clamp		
50020	70237	5/8"-11 x 5.62 HEX Full Thread Zinc Plated	70169	Flanged Washer 5/8-11 (2Pack) .66" ID X 1.44" OD / Zinc Plated

Vertical Clamps

50540 & 17040
Competitor Cross: 201-U & 201-USS

50560
Competitor Cross: 201-UB

50500
Competitor Cross: 202

50520 & 17000
Competitor Cross: 202-U & 202-USS

50440
Competitor Cross: 202-UB

50460
Competitor Cross: 202-B

50480
Competitor Cross: 202-TU

50420
Competitor Cross: 202-T

Vertical Clamps

50360
Competitor Cross: 207-UL

50380 & 17060
Competitor Cross: 207-U & 207-USS

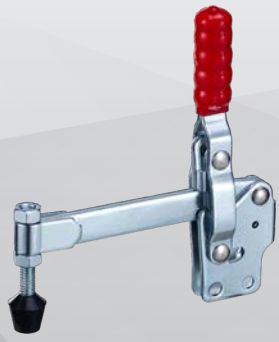
50340
Competitor Cross: 207-UB

50400
Competitor Cross: 207-TU

50240
Competitor Cross: 207-ULB

50280
Competitor Cross: 207-L

50320
Competitor Cross: 207-SB



50260
Competitor Cross: 207-LB

Vertical Clamps

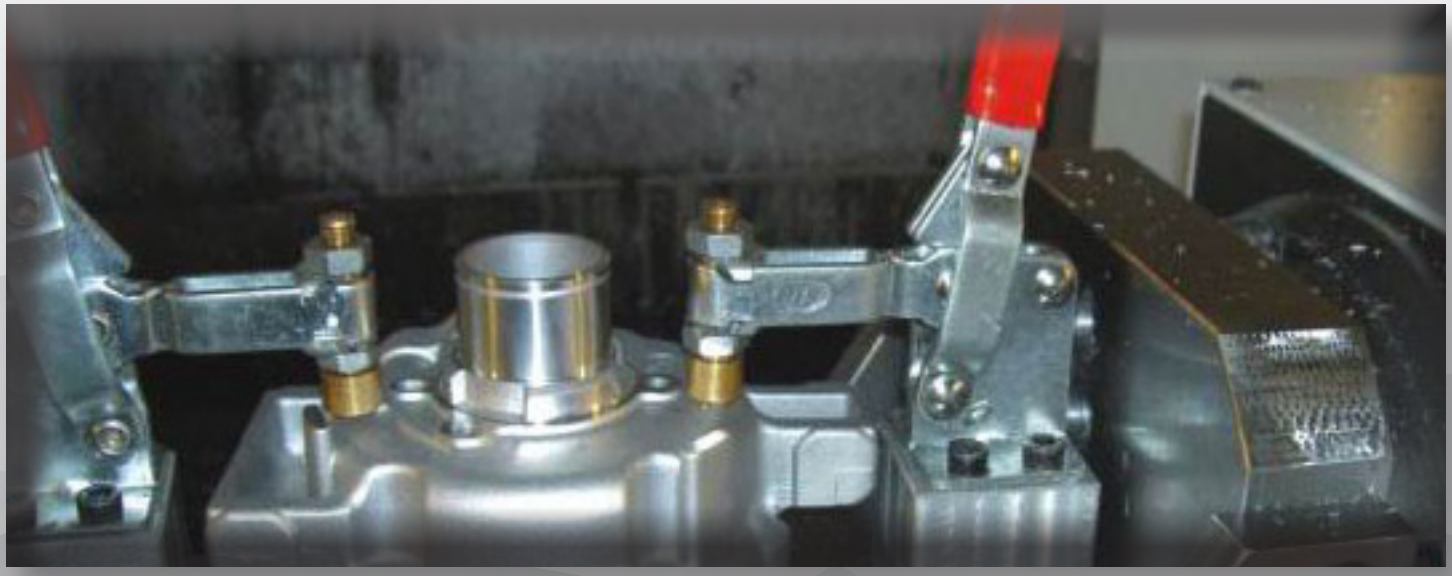
50220
Competitor Cross: 210-U

50160
Competitor Cross: 210-S

50200
Competitor Cross: 210-SB

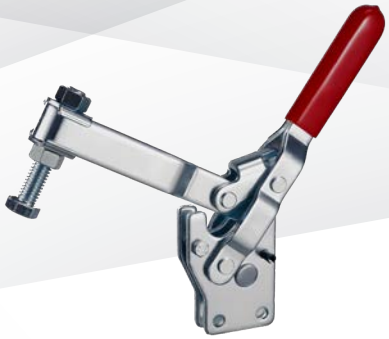
50120
Competitor Cross: 210-UB

50180
Competitor Cross: 210-TU



Vertical Clamps

50100
Competitor Cross: 247-U



50080
Competitor Cross: 247-UB

50060
Competitor Cross: 247-S

50040
Competitor Cross: 247-SB

50020
Competitor Cross: 267-U

50000
Competitor Cross: 267-S

Horizontal Clamps

High-quality carbon steel • Stainless steel models available • Hardened steel bushings
60lbs - 750lbs • Heavy and light-duty available • Compact design ideal for confined spaces
Low profile options • U-bar and solid bar • Variety of sizes for all applications
Horizontal action • Ergonomic handle • 100% USA quality control

Model	Competitor	Description
19000	205-USS	60LB U-BAR FLG BASE STAINLESS STEEL HORIZONTAL HOLD-DOWN CLAMP
60240	205-U	60LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60300	205-UB	60LB U-BAR STRAIGHT BASE HORIZONTAL HOLD-DOWN CLAMP
60260	205-S	60LB Solid Bar FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60280	205-SB	60LB Solid Bar STRAIGHT BASE HORIZONTAL HOLD-DOWN CLAMP
18000	305-USS	150LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP STAINLESS STEEL
60220	305-U	150LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60060	213-U	150LB FLANGE BASE U-BAR LOW PROFILE HORIZONTAL TOGGLE CLAMP
60140	215-SB	200LB LOW PROFILE U BAR STRAIGHT BASE HORIZONTAL HOLD-DOWN CLAMP
60160	215-U	200LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60180	215-S	200LB SOLID BAR FLANGED BASE HORIZONTAL HOLD-DOWN CLAMP
60200	215-UB	200LB U-BAR STRAIGHT BASE HORIZONTAL HOLD-DOWN CLAMP
17020	307-USS	300LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP STAINLESS STEEL
60080	307-U	300LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
19060	225-USS	500LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP STAINLESS STEEL
60100	225-U	500LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60120	225-UB	500LB U-BAR STRAIGHT BASE HORIZONTAL HOLD-DOWN CLAMP
60020	309-U	700LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60000	235-U	750LB U-BAR FLANGE BASE HORIZONTAL HOLD-DOWN CLAMP
60040	235-UB	750LB U-BAR STRAIGHT BASE HORIZONTAL HOLD-DOWN CLAMP

Horizontal Accessories

Model	Accessory 1	Description	Accessory 2	Description
19000	70200	M4 X .89 HEX Full Thread / Stainless Steel	70183	Flanged Washer #8 or M4 (2Pack) 0.17" ID X 0.44" OD / Stainless Steel
60240	70185	M4 X .87 Round Neoprene	70184	Flanged Washer #8 or M4 (2Pack) 0.17" ID X 0.44" OD Zinc Plated
60300	70185	M4 X .87 Round Neoprene	70184	Flanged Washer #8 or M4 (2Pack) 0.17" ID X 0.44" OD Zinc Plated
60260	70185	M4 X .87 Round Neoprene		
60280	70185	M4 X .87 Round Neoprene		
18000	70150	M5 X 1.49 HEX Full Thread / Stainless Steel	70172	Flanged Washer #10 (2Pack) 0.20" ID X 0.56" OD / Stainless Steel
60220	70187	M10 X 1.38 Round Neoprene	70163	Flanged Washer M5 or #10 (2Pack) .20" ID X .56" OD Zinc Plated
60060	70190	M5 X 1.34 Round Neoprene	70163	Flanged Washer M5 or #10 (2Pack) .20" ID X .56" OD Zinc Plated
60140	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
60160	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26 "ID X 0.69" OD Zinc Plated
60180	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70223	5/16"-18 X 1.25" Bolt Retainer for Solid Bar Clamp
60200	70155	1/4"-20 X 1.75 Bonded Neoprene Cap Full Thread Zinc Plated	70170	Flanged Washer M6 or 1/4" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
17020	70256	M8-1.25 X 2.5" Neoprene Tip / Stainless Steel	70177	Flanged Washer 5/16" (2Pack) 0.33" ID X 0.88" OD / Stainless Steel
60080	70165	M8 X 1.25 Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
19060	70257	3/8-16 x 2.8" Neoprene Tip / Stainless Steel	70177	Flanged Washer 5/16" (2Pack) 0.33" ID X 0.88" OD / Stainless Steel
60100	70160	5/16"-18 X 2.5" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
60120	70160	5/16"-18 X 2.5" Flat Tip Bonded Neoprene Cap Full Thread Zinc Plated	70167	Flanged Washer 5/16" (2Pack) 0.26" ID X 0.69" OD Zinc Plated
60020	70157	M10 X 3.5" Flat Bonded Neoprene Cap Full Threaded	70166	Flanged Washer 9.5MM or 3/8" (2Pack) .41" ID X 1" OD Zinc Plated
60000	70157	M10 X 3.5" Flat Bonded Neoprene Cap Full Threaded	70166	Flanged Washer 9.5MM or 3/8" (2Pack) .41" ID X 1" OD Zinc Plated
60040	70157	M10 X 3.5" Flat Bonded Neoprene Cap FULL Full Threaded	70166	Flanged Washer 9.5MM or 3/8" (2Pack) .41" ID X 1" OD Zinc Plated

Horizontal Clamps

60240 & 19000
Competitor Cross: 205-U & 205-USS

60300
Competitor Cross: 205-UB

60260
Competitor Cross: 205-S

60280
Competitor Cross: 205-SB

60220 & 18000
Competitor Cross: 305-U & 305 -USS

60060
Competitor Cross: 235-UB

60140
Competitor Cross: 215-SB

60160
Competitor Cross: 215-U

Horizontal Clamps

60180
Competitor Cross: 215-S

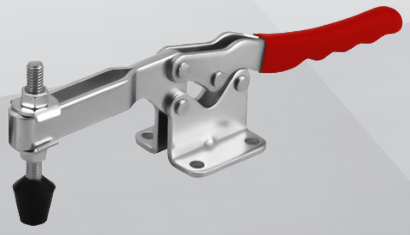
60200
Competitor Cross: 215-UB

17020 & 60080
Competitor Cross: 307-U 307-USS

19060 & 60100
Competitor Cross: 225-U & 225-USS

60120
Competitor Cross: 225-UB

60020
Competitor Cross: 309-U



60000
Competitor Cross: 235-U

60040
Competitor Cross: 235-UB

Latch Clamps

High-quality carbon steel • Stainless steel models available • Hardened steel bushings
360lbs - 7500lbs • Heavy and light-duty available • U-hook, J-hook and Solid hook
U-hook clamps supplied with fully threaded u-hooks for easy adjustment
100% USA quality control

Model	Competitor	Description
16100	323-SS	360LB U-HOOK FLANGE BASE LATCH CLAMP / STAINLESS STEEL LATCH PLATE INCLUDED
40240	323	360LB U-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE INCLUDED
16040	351-SS	375LB J-HOOK FLANGED BASE LATCH CLAMP / STAINLESS STEEL
40220	351	375LB J-HOOK FLANGED BASE LATCH CLAMP
40160	351-B	375LB J-HOOK NARROW BASE LATCH CLAMP
40060	301	375LB SOLID HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE NOT INCLUDED
16060	324-SS	500LB VERT U-HOOK FLANGE BASE LATCH CLAMP / STAINLESS STEEL / LATCH PLATE INCLUDED
40180	324	500LB VERT U-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE INCLUDED
40260	0	600LB U-BOLT-5.25" FLANGE BASE LATCH CLAMP
16080	331-SS	700LB U-HOOK FLANGE BASE LATCH CLAMP / STAINLESS STEEL / LATCH PLATE INCLUDED
40200	331	700LB U-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE INCLUDED
40100	371	750LB J-HOOK FLANGE BASE LATCH CLAMP
16000	334-SS	1000LB VERT U-HOOK FLANGE BASE LATCH CLAMP / STAINLESS STEEL / LATCH PLATE INCLUDED
40120	334	1000LB VERT U-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE INCLUDED
40020	381	1000LB J-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE NOT INCLUDED
16020	341-SS	2000LB U-HOOK FLANGE BASE LATCH CLAMP / STAINLESS STEEL / LATCH PLATE INCLUDED
40140	341	2000LB U-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE INCLUDED
80000	341-R	2000LB HORIZONTAL FLANGE BASE / SELF LOCKING LATCH CLAMP / LATCH PLATE INCLUDED
40080	344	2000LB VERT U-HOOK FLANGE BASE LATCH CLAMP / LATCH PLATE INCLUDED
40040	375	4000LB U-HOOK LATCH CLAMP / LATCH PLATE NOT INCLUDED
40000	385	7500LB U-HOOK LATCH CLAMP / LATCH PLATE SOLD SEPARATELY
40010	385+	7500LB U-HOOK LATCH CLAMP / LATCH PLATE INCLUDED

Latch Accessories

Model	Accessory 1	Description	Accessory 2	Description
16100	70010	M4 X 2.12 / U-Bolt Accessory / Stainless Steel	70102	Latch Plate Accessory .783L X .51W / Stainless Steel
40240	70005	M4 X 2.12 / U-Bolt Spindle Accessory	70101	CLEAT Latch Plate Accessory .79L X .51W
16040	70070	M8 X 6 / J-Hook Spindle Accessory / Stainless Steel		
40220	70075	M8 X 6 / J-Hook Spindle Accessory		
40160	70075	M8 X 6 / J-Hook Spindle Accessory		
40060	NOT SUPPLIED			
16060	70020	M4 X 3.09 / U-Bolt Spindle Accessory / Stainless Steel	70105	CLEAT Latch Plate Accessory 1L x .55W Stainless Steel
40180	70015	M4 X 3 / U-Bolt Spindle Accessory	70100	CLEAT Latch Plate Accessory 1L x .53W
40260	NOT SUPPLIED			
16080	70065	M5 X 3.48 / U-Bolt Spindle Accessory / Stainless Steel	70135	CLEAT Latch Plate Accessory 1L x .787W Stainless Steel
40200	70060	M5 X 3.48 / U-Bolt Spindle Accessory	70018	CLEAT Latch Plate Accessory 1L x .79W
40100	70050	M10 X 7.01 / J-Hook Spindle Accessory		
16000	70030	M6 X 4.45 / U-Bolt Spindle Accessory / Stainless Steel	70110	CLEAT Latch Plate Accessory 1.5L X .8W Stainless Steel
40120	70025	M6 X 4.5 / U-Bolt Spindle Accessory	70115	CLEAT Latch Plate Accessory 1.5L X .684W
40020	70145	M12 X 7.75 / J-Hook Spindle Accessory		
16020	70040	M8 X 4.49 / U-Bolt Spindle Accessory / Stainless Steel	70140	Latch Plate Accessory 1.5L X 1.18W Stainless Steel
40140	70035	M8 X 4.49 / U-Bolt Spindle Accessory	70017	CLEAT Latch Plate Accessory 1.516L X 1.21W
80000	70035	M8 X 4.49 / U-Bolt Spindle Accessory	70017	CLEAT Latch Plate Accessory 1.516L X 1.21W
40080	70045	M8 X 5.81 / U-Bolt Spindle Accessory	70120	CLEAT Latch Plate Accessory 2.13L X 1.2W
40040	70000	M10 X 5.72 / U-Bolt Spindle Accessory	70130	Heavy Duty Latch Plate Accessory 3.13L X 2.26W
40000	70055	M12 X 5.72 / U-Bolt Spindle Accessory		
40010	70055	M12 X 5.72 / U-Bolt Spindle Accessory	70130	Heavy Duty Latch Plate Accessory 3.13"L X 2.26"W

Latch Clamps

16100 & 40240
Competitor Cross: 323SS & 323

16040 & 40220
Competitor Cross: 351SS & 351

40160
Competitor Cross: 351-B

40060
Competitor Cross: 331SS &331

16060 & 40180
Competitor Cross: 324-SS & 324

40260

16080 & 40200
Competitor Cross: 331-SS &331

40100
Competitor Cross: 371

Latch Clamps

16000 & 40120
Competitor Cross: 334-SS & 334

40020
Competitor Cross: 381

16020 & 40140
Competitor Cross: 341-SS & 341

80000
Competitor Cross: 341-R

40080
Competitor Cross: 344

40040
Competitor Cross: 375

40000
Competitor Cross: 385

Push/Pull Clamps

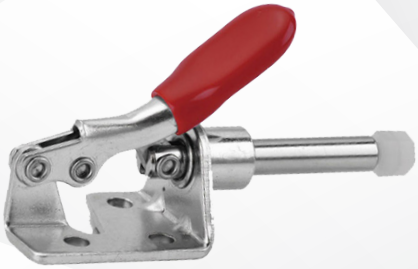
High-quality carbon steel • Stainless steel models available • Versatile and compact straight-line/push-pull action clamps • 1000lbs - 2500lbs • Low-profile with high holding capacity Threaded body for through hole mounting • Handle can rotate and fall below mounting position to lock in retracted position • Ergonomic handle •100% USA quality control

Model	Competitor	Description
30280	601-M	100LB / M4 P=0.7 / FLANGE BASE / STRAIGHT-LINE CLAMP / METRIC THREAD
30300	601	100LB / FLANGE BASE / STRAIGHT-LINE CLAMP
15040	602-SS	200LB / 1/4-20 THREADED BODY / STRAIGHT-LINE CLAMP / STAINLESS STEEL
30220	602	200LB / 1/4-20 THREAD BODY / STRAIGHT LINE CLAMP
15060	602-MMSS	200LB / M6 THREADED BODY / STRAIGHT-LINE CLAMP / STAINLESS STEEL
30160	602-MM	200LB / M6 THREAD BODY / STRAIGHT-LINE CLAMP
15000	604-SS	300LB / 5/16-18 / THREADED BODY / STRAIGHT-LINE CLAMP / STAINLESS STEEL
30200	604	300LB / 5/16-18 THREADED BODY / STRAIGHT-LINE CLAMP
15020	604-MMSS	300LB / M8 THREADED BODY / STRAIGHT-LINE CLAMP / STAINLESS STEEL
30180	604-MM	300LB / THREADED BODY / STRAIGHT-LINE CLAMP / INCH SPINDLE
30240	605	300LB / FLANGE BASE / STRAIGHT-LINE CLAMP
30260	609	400LB / 5/16-18 FLANGE BASE / STRAIGHT- LINE CLAMP
30120	603-M	600LB / M8 P=1.25 BASE MOUNT / STRAIGHT-LINE CLAMP / METRIC THREAD
30140	603	600LB / 5/16-18 FLANGE BASE MOUNT / 45 DEGREE HANDLE / STRAIGHT-LINE CLAMP / INTERNAL THREAD
30000	607	700LB / 5/16-18 FLANGE BASE / STRAIGHT-LINE CLAMP
30040	624-MM	700LB / M10 P=1.5 THREADED BODY / STRAIGHT-LINE CLAMP / METRIC THREAD
30060	624	700LB / 3/8-16 THREADED BODY / STRAIGHT-LINE CLAMP
30080	610	800LB / FLANGE BASE / STRAIGHT-LINE CLAMP
30100	608-M	850LB / M10 P=1.5 / FLANGE BASE / STRAIGHT-LINE CLAMP / METRIC THREAD
30020	630-M	2500LB / FLANGE BASE / STRAIGHT-LINE CLAMP / METRIC THREAD

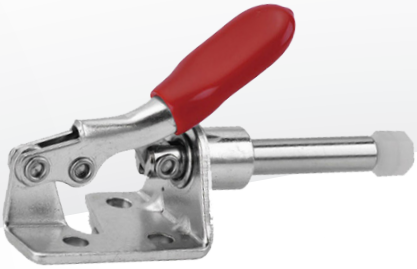
Push/Pull Accessories

Model	Accessory 1	Description
30280	70185	M4 X .87 / Round Neoprene Spindle Accessory
30300	70180	#8-32 X .86 / Hex Full Thread / Nylon / Spindle Accessory
15040	70255	1/2" - .88 X 1.49" / Bolt Retainer for Solid Bar Clamp
30220	70198	1/4-20 x 1.64 / Hex Full Thread / Zinc Plated Spindle Accessory
15060	70195	M6 X 1.74 Full Thread Spindle Accessory / Stainless Steel
30160	70197	M6 x 1.74 / Hex Full Thread / Zinc Plated Spindle Accessory
15000	70230-SS	5/16-18 X 2.22 / Hex Full Thread Spindle Accessory / Stainless Steel
30200	70230	5/16-18 X 2.22/ Hex Full Thread / Zinc Plated Spindle Accessory
15020	70210	M8 X 2.17 / Hex Full Thread Spindle Accessory / Stainless Steel
30180	70215	5/16-18 X 2 / Hex Full Thread / Zinc Plated Spindle Accessory
30240	70230	5/16-18 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30260	70230	5/16-18 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30120	70205	M8 X 2.17 / Hex Full Thread / Zinc Plated Spindle Accessory
30140	70230	5/16-18 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30000	70230	5/16-18 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30040	70220	M10 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30060	70240	3/8-16 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30080	70240	3/8-16 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30100	70220	M10 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory
30020	70220	M10 X 2.22 / Hex Full Thread / Zinc Plated Spindle Accessory

Push/Pull Clamps



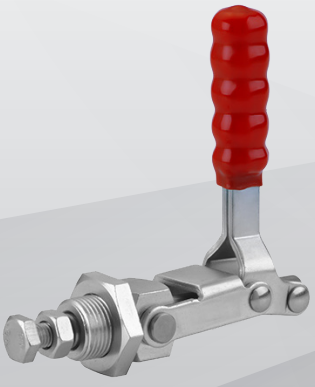
30280
Competitor Cross: 601-M



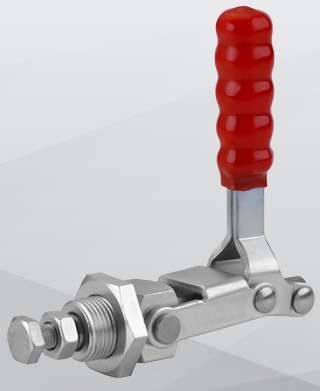
30300
Competitor Cross: 601

15040 & 30220
Competitor Cross: 602SS & 602

15060 & 30160
Competitor Cross: 602MMSS & 602



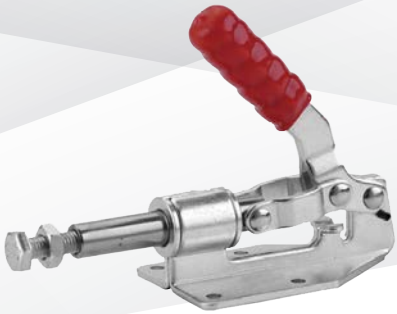
15000 & 30200
Competitor Cross: 604SS & 604



15020 & 30180
Competitor Cross: 604MMSS & 604MM

Push/Pull Clamps

30240
Competitor Cross: 605



30260
Competitor Cross: 609

30120
Competitor Cross: 603-M

30140
Competitor Cross: 603

30000
Competitor Cross: 607

30040
Competitor Cross: 624-MM

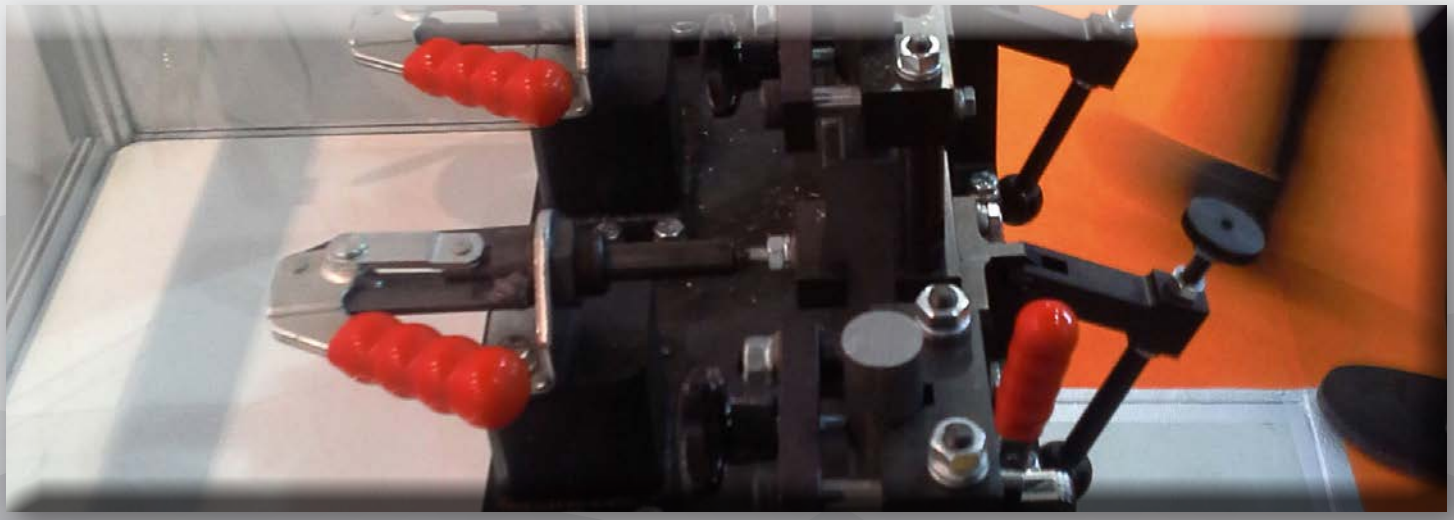
Push/Pull Clamps

30060
Competitor Cross: 624

30080
Competitor Cross: 610

30100
Competitor Cross: 608-M

30020
Competitor Cross: 630-M



Cross Reference

SHOPFORCE	DESTACO	CLAMP-RITE	CARRLANE	CENTURY	ESSENTRA	GOODHAND	JERGENS	KAKUTA	BRAUER
50540	201-U	11011CR	CL-150-VTC	CT-11011	ETC-11011	GH-101-A	70000	HV 150	V75/2B
50560	201-UB	11012CR	CL-151-VTC	CT-11012	ETC-11012	GH-101-AI	70001	HV 151-B	V75/1B
17040	201-USS	11011CR-SS		CT-11011-SS	ETC-11011-SS	GH-101-ASS	70000-SS		
50020	267-U	11671CR	CL-1050-VTC	CT-11671	ETC-11671	GH-101-J	70016	HV 1050	V550/2B
50000	267-S	11674CR	CL-1050-VTC	CT-11674	ETC-11674	GH-101-JS	70053		
50100	247-U	11471CR	CL-850-VTC	CT-11471	ETC-11471	GH-10247	70014	HV 850	V450/2B
50080	247-UB	11472CR		CT-11472	ETC-11472	GH-10248	70135		
50060	247-S	11474CR	CL-750-VTC	CT-11474	ETC-11474	GH-10249	70015	HV 750	V450/2A
50040	247-SB	11477CR		CT-11477	ETC-11477	GH-10250	70134		
50500	202	11020CR	CL-250-VTC	CT-11020	ETC-11020	GH-12050	70002	HV 250	V150/2C
50520	202-U	11021CR	CL-253-VTC	CT-11021	ETC-11021	GH-12050-U	70003	HV 250-U	V150/2B
17000	202-USS	11021CR-SS		CT-11021-SS	ETC-11021-SS		70003-SS		
50460	202-B	11025CR	CL-251-VTC	CT-11025	ETC-11025	GH-12055	70005	HV 251-B	V150/1C
50440	202-UB	11022CR		CT-11022	ETC-11022		70004	HV 251-UB	V150/1B
50480	202-TU	11023CR		CT-11023	ETC-11023		70131		
50420	202-T	11026CR		CT-11026	ETC-11026	GH-12070	70121		
50380	207-U	11071CR	CL-450-VTC	CT-11071	ETC-11071	GH-12130	70007	HV 450	V250/2B
17060	207-USS	11071CR-SS		CT-11071-SS	ETC-11071-SS	GH-12130-SS	70007-SS		
50400	207-TU	11073CR	CL-452-VTC	CT-11073	ETC-11073	GH-12131	70009	HV 452-T	
50360	207-UL	11018CR		CT-11018	ETC-11018	GH-12132	70006	HV 253-L	
50340	207-UB	11072CR	CL-451-VTC	CT-11072	ETC-11072	GH-12135	70008	HV 451-B	V250/1B
50240	207-ULB	11019CR		CT-11019	ETC-11019	GH-12137	70133		
50300	207-S	11074CR	CL-350-VTC	CT-11074	ETC-11074	GH-12140	70010	HV 350	V250/2A
50280	207-L	11078CR		CT-11078	ETC-11078	GH-12142	70123		
50320	207-SB	11077CR		CT-11077	ETC-11077	GH-12145	70122		
50260	207-LB	11079CR		CT-11079	ETC-11079	GH-12147	70132		
50220	210-U	11101CR	CL-650-VTC	CT-11101	ETC-11101	12265	70011	HV 650	V350/2B
50120	210-UB	11102CR		CT-11102	ETC-11102		70124		
50160	210-S	11104CR	CL-550-VTC	CT-11104	ETC-11104	GH-12275	70012	HV 550	V350/2A
50200	210-SB	11107CR	CL-551-VTC	CT-11107	ETC-11107	12280	70013	HV 551-B	V350/1A
50180	210-TU	11103CR		CT-11103	ETC-11103	GH-12285	70125		
60220	305-U	16051CR	CL-200-VTC	CT-16051	ETC-16051	GH-13005	70026		V70/2BT
18000	305-USS	16051CR-SS		CT-16051-SS	ETC-16051-SS	GH-13005-SS	70026-SS (70130)		
60080	307-U	16071CR	CL-300-VTC	CT-16071	ETC-16071	GH-13007	70027		
17020	307-USS	16071CR-SS							
60020	309-U	16091CR	CL-500-VTC	CT-16091	ETC-16091	GH-13008	70028		
60240	205-U	14051CR	CL-250-HTC	CT-14051	ETC-14051	GH-201	70018		H50/2B
60260	205-S	14054CR	CL-150-HTC	CT-14054	ETC-14054	GH-201-A	70019		H50/2C
60280	205-SB	14057CR		CT-14057	ETC-14057	GH-201-AI	70138		
60160	215-U	14151CR	CL-350-HTC	CT-14151	ETC-14151	GH-201-B	70020		
60200	215-UB	14152CR	CL-351-HTC	CT-14152	ETC-14152	GH-201-BSS	70021		
60180	215-S	14154CR		CT-14154	ETC-14154	GH-201-BSS	70128		
60140	215-SB	14157CR		CT-14157	ETC-14157	GH-201-BSI	70129		
19000	205-USS	14051CR-SS		CT-14051-SS	ETC-14051-SS	GH-201-SS	70127		
60000	235-U	14351CR	CL-550-HTC	CT-14351	ETC-14351	GH-20235	70024		H350/2B
60040	235-UB	14352CR		CT-14352	ETC-14352	GH-20236	70025		
60060	213-U	14131CR		CT-14131CR	ETC-14131CR		70137		
50140	317-U	11170CR	CL-475-HTC	CT-11170	ETC-11170	GH-20820	70017		
60100	225-U	14251CR	CL-450-HTC	CT-14251	ETC-14251	GH-225-D	70022		
60120	225-UB	14252CR	CL-451-HTC	CT-14252	ETC-14252	GH-225-DI	70023		
19060	225-USS	14251CR-SS		CT-14251-SS	ETC-14251-SS	GH-225-DSS	70022-SS		
30300	601	13010CR	CL-50-SPC	CT-13010	ETC-13010	GH-301-A	70042		
30280	601-M	13010CRM	CLM-50-SPC	CT-13010M	ETC-13010M	301-AM		SL 10	P50
30240	605	13050CR	CL-150-SPC	CT-13050	ETC-13050	GH-302-F	70046		
30100	608-M	13485CRM	CLM-200-PC	CT-13485M	ETC-13485M	304-EM		SL 210	
30000	607	13070CR		CT-13070	ETC-13070	GH-30607	70051		
30140	603	13030CR	CL-100-PC	CT-13030	ETC-13030	GH-36003	70047		
30120	603-M	13030CRM	CLM-100-PC	CT-13030M	ETC-13030M	36003M		SL 105-2	
30080	610	13100CR	CL-250-SPC	CT-13100	ETC-13100	GH-36010	70050		
30260	609	13090CR		CT-13090	ETC-13090	GH-36092, GH-36020	70049		
30220	602	13020CR	CL-150-TPC	CT-13020	ETC-13020	GH-36202	70043		
30160	602-MM	13020CRM	CLM-150-TPC	CT-13020M	ETC-13020M	36202M		FM 50	P100
15060	602-MSS	13020CRM-SS		CT-13020M-SS	ETC-13020M-SS				
15040	602-SS	13020CR-SS		CT-13020-SS	ETC-13020-SS		70043-SS		
30200	604	13040CR	CL-250-TPC	CT-13040	ETC-13040	GH-36204	70044		
30180	604-MM	13040CRM	CLM-250-TPC	CT-13040M	ETC-13040M	36204M		FM 150	P200
15020	604-MSS	13040CRM-SS		CT-13040M-SS	ETC-13040M-SS				
15000	604-SS	13040CR-SS		CT-13040-SS	ETC-13040-SS		70044-SS		
30060	624	13240CR	CL-350-TPC	CT-13240	ETC-13240	GH-36224	70045		
30040	624-MM	13240CRM	CLM-350-TPC	CT-13240M	ETC-13240M	36224M		FM 250	
30020	630-M	13300CRM	CLM-350-TPC	CT-13300M	ETC-13300M	36330M		SL 350	
40240	323	12230CR	CL-100-PA	CT-12230	ETC-12230	GH-40323	70029	FA 100	LU200H
16100	323-SS	12230CR-SS		CT-12230-SS	ETC-12230-SS	GH-40323-SS	70136		
40180	324	12240CR	CL-110-PA	CT-12240	ETC-12240	GH-40324	70034	FA 130	LU200V
16060	324-SS	12240CR-SS		CT-12240-SS	ETC-12240-SS		70034-SS		
40120	334	12340CR	CL-210-PA	CT-12340	ETC-12340	GH-40334	70035	FA 230	LU400V
16000	334-SS	12340CR-SS		CT-12340-SS	ETC-12340-SS		70035-SS		
40140	341	12410CR	CL-300-PA	CT-12410	ETC-12410	GH-40341	70031	FA 300	
16020	341-SS	12410CR-SS		CT-12410-SS	ETC-12410-SS	GH-40341-SS	70031-SS		
40080	344	12440CR	CL-310-PA	CT-12440	ETC-12440	GH-40344	70036	FA 330	LU700V
40040	375	12750CR	CL-400-PA	CT-12750	ETC-12750	40370	70032	FA 600	
40100	371	12710CR		CT-12710	ETC-12710	GH-40371		PA 270	
40000	385	12850CR	CL-500-PA	CT-12850	ETC-12850	GH-40380	70033	FA 700	
40200	331	12310CR	CL-200-PA	CT-12310	ETC-12310	GH-431	70030	FA 200	LU400H
40060	301	12010CR	CL-150-PA	CT-12010	ETC-12010	GH-43101	70041	PA 150	
16080	331-SS	12310CR-SS		CT-12310-SS	ETC-12310-SS	GH-431-SS	70030-SS		
40020	381	12810CR		CT-12810	ETC-12810	GH-43810	70040	PA 350	
40220	351	12510CR	CL-250-PA	CT-12510	ETC-12510	GH-451	70037	PA 250	LH200
16040	351-SS	12510CR-SS		CT-12510-SS	ETC-12510-SS	GH-451-SS	70037-SS		
40160	351-B	12515CR	CL-251-PA	CT-12515	ETC-12515	GH-452	70038	PA 251-B	

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