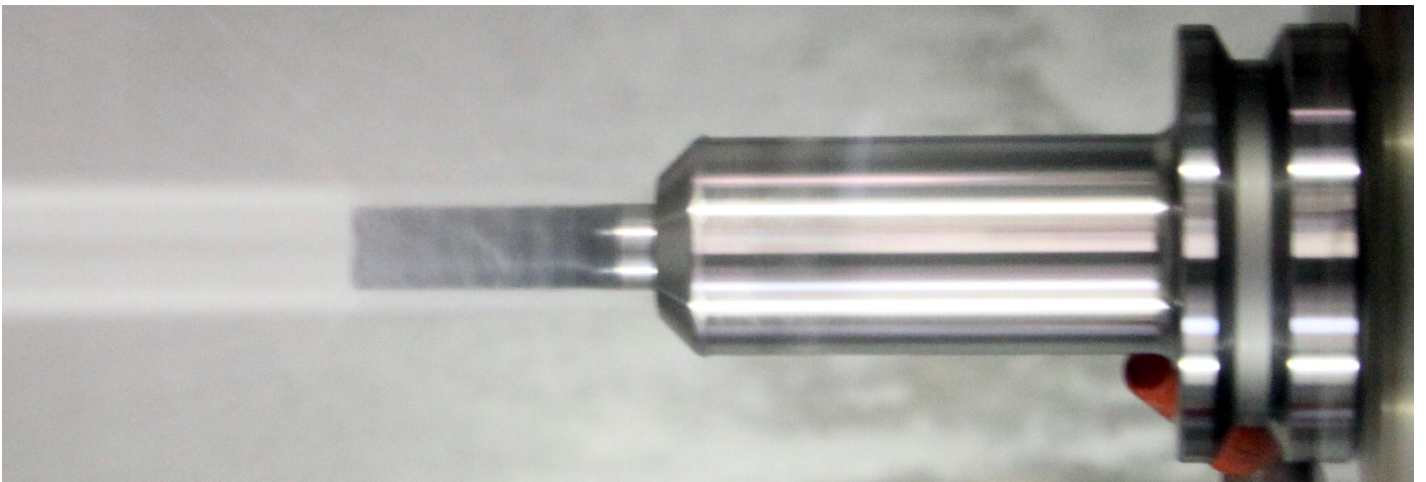




Performance Tooling Promotion



Promotion Pricing Valid Until
6/30/2014

**All Products inventoried
in California for Fast Delivery**



ER Collet Chucks



Premium Performance

Premium Precision

0.0001" TIR OD Taper to ID Taper Guaranteed

Dynamic Balance

Dynamically Balanced Body for G6.3 @ 20,000 RPM's (CAT50 @ 15,000) and the Nuts are also Dynamically Balanced Separately

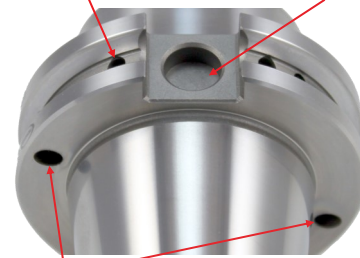
Best in Class Performance

Pioneer ER exceeds DIN 6499 to provide optimum performance and interchangeability

Standard Features

Dynamic Balance Compensation

ID Chip Hole

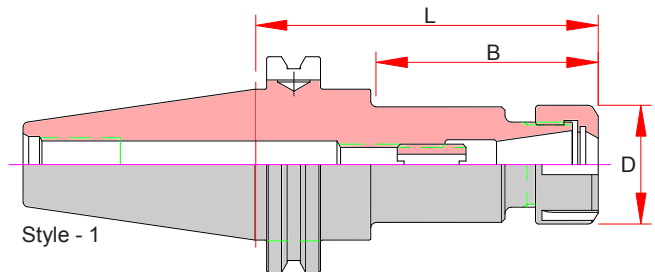


DIN AD+B Flange Coolant

CAT40 ER Collet Chucks

Features

- 3 μm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- DIN AD+B Flange Coolant Standard
- Dynamically Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



Capacity	Part Number	Range	B	D	L Projection	Screw	List Price	Your Price
3/8	CAT40-ER16H-0250	.019-.394	1.55	1.10	2.50	ASC-ER16	\$132.00	\$88.00
	CAT40-ER16H-0400		2.42		4.00		\$140.00	\$93.34
3/4	CAT40-ER32-0250	.039-.787	1.73	1.96	2.50	ASC-ER32	\$148.00	\$98.67
	CAT40-ER32-0400		3.23		4.00		\$152.00	\$101.34



ER Precision Inch Collets

Features

- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R. (Available from Chicago)
- Collapse Range: 1mm (.039)

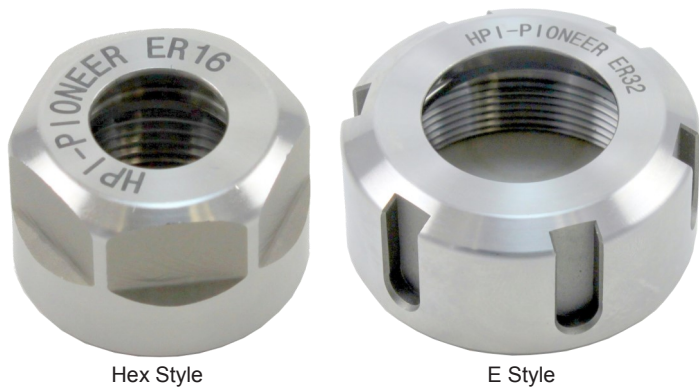
ER16 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 16	List Price	Your Price
1/16	0.0625	0.0231	ER16-0062	\$28.00	\$18.67
3/32	0.0938	0.0544	ER16-0093	\$28.00	\$18.67
1/8	0.1250	0.0856	ER16-0125	\$20.50	\$13.67
5/32	0.1563	0.1169	ER16-0156	\$20.50	\$13.67
3/16	0.1875	0.1481	ER16-0187	\$20.50	\$13.67
7/32	0.2188	0.1794	ER16-0218	\$20.50	\$13.67
1/4	0.2500	0.2106	ER16-0250	\$20.50	\$13.67
9/32	0.2813	0.2419	ER16-0281	\$20.50	\$13.67
5/16	0.3125	0.2731	ER16-0312	\$20.50	\$13.67
11/32	0.3438	0.3044	ER16-0344	\$20.50	\$13.67
3/8	0.3750	0.3356	ER16-0375	\$20.50	\$13.67

ER32 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 32	List Price	Your Price
3/32	0.0938	0.0544	ER32-0093	\$30.00	\$20.00
1/8	0.1250	0.0856	ER32-0125	\$23.00	\$15.34
5/32	0.1563	0.1169	ER32-0156	\$23.00	\$15.34
3/16	0.1875	0.1481	ER32-0187	\$23.00	\$15.34
7/32	0.2188	0.1794	ER32-0218	\$23.00	\$15.34
1/4	0.2500	0.2106	ER32-0250	\$23.00	\$15.34
9/32	0.2813	0.2419	ER32-0281	\$23.00	\$15.34
5/16	0.3125	0.2731	ER32-0312	\$23.00	\$15.34
3/8	0.3750	0.3356	ER32-0375	\$23.00	\$15.34
7/16	0.4375	0.3981	ER32-0438	\$23.00	\$15.34
1/2	0.5000	0.4606	ER32-0500	\$23.00	\$15.34
9/16	0.5625	0.5231	ER32-0563	\$23.00	\$15.34
5/8	0.6250	0.5856	ER32-0625	\$23.00	\$15.34
11/16	0.6875	0.6481	ER32-0688	\$23.00	\$15.34
3/4	0.7500	0.7106	ER32-0750	\$23.00	\$15.34

Collet Nuts



Hex Style

E Style

Wrenches



Hex Style

E Style

Nut Part Number	Description	Max. Torque	List Price	Your Price
ERN-16H	ER 16 Nut - Hex	40 ft/lbs	\$48.00	\$32.00
ERN-32E	ER 32 Nut - E Type	100 ft/lbs	\$48.00	\$32.00

Wrench Part Number	Description	List Price	Your Price
ERW-16H	ER16 HEX WRENCH	\$24.00	\$16.00
ERW-32E	ER32 E STYLE WRENCH	\$28.00	\$18.67



New SX25M Mini-Max Nut

Mini Clearance Maximum Capacity & Performance

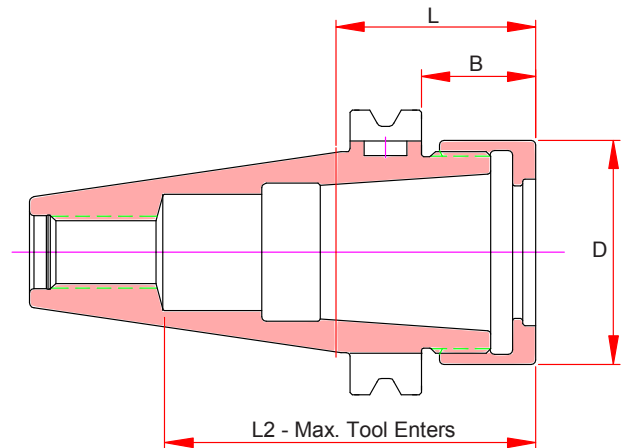
Introducing the next step in performance Collet Chucks. Designed to fit existing ER32 applications and provide superior TIR, Driving Torque and 25% greater tool capacity. The Stub projection model provides superior rigidity in some of the most demanding applications.

- Nut Diameter of 1.97", 50mm, same as ER32 for optimal clearance
- 1" Capacity (ER32 is 3/4") for extended range
- 1.75" Stub Designed for Maximum Rigidity
- Optional Bearing Nut for High Radial Torque of 200 ft/lbs on 1" Carbide Shanks, 40% Higher than ER40
- 0.0002" TIR at 4" from the Collet Face (1" Tooling)
- 8° Collet, 4X Better TIR than ER
- Interchangeable with existing SX25 holders, collets & wrenches

CAT40 SX Mini-Max Collet Chucks

Features

- 3 μm - 0.0001" Runout Taper to Taper
- Mini Nut for Maximum Clearance
- DIN B Flange Coolant Standard
- Dynamically Balanced G2.5 @ 25,000 RPM
- Order Collets & Wrench Separately



Capacity	Part Number	Range	B	D	L Projection	L2 Max. Tool	List Price	Your Price
1"	CAT40-SX25M-0175-D**	.125 - 1.000	1.00	1.98	1.75	3.22	\$199.00	\$172.47

** Nut Diameter is larger than ANSI B5.50 Safety Area, may not function in Umbrella Style Tool Changers

SX25 Collets B - Type Ranging Collets

Features

- Premium 5µm - 0.0002" T.I.R. @ 4X tool diameter
- Flat ground shoulder guarantees the collet to be seated correctly for optimal repeatability.
- Up to 0.020" (0.5mm) Collapse Range (see chart)



Size	Inch	Inch Min.	MM	MM Min.	SX25	List Price	Your Price
1/8	0.1250	0.1053	3.175	2.675	SX25-0125	\$60.00	\$52.00
3/16	0.1875	0.1678	4.763	4.262	SX25-0187	\$56.00	\$48.54
1/4	0.2500	0.2303	6.350	5.850	SX25-0250	\$56.00	\$48.54
5/16	0.3125	0.2928	7.938	7.437	SX25-0312	\$56.00	\$48.54
3/8	0.3750	0.3553	9.525	9.025	SX25-0375	\$56.00	\$48.54
1/2	0.5000	0.4803	12.700	12.200	SX25-0500	\$56.00	\$48.54
5/8	0.6250	0.6053	15.875	15.375	SX25-0625	\$56.00	\$48.54
3/4	0.7500	0.7303	19.050	18.550	SX25-0750	\$56.00	\$48.54
7/8	0.8750	0.8553	22.225	21.725	SX25-0875	\$56.00	\$48.54
1	1.0000	0.9803	25.400	24.900	SX25-1000	\$56.00	\$48.54

SX Collet Nuts



Mini-Max Bearing Nut



Mini-Max Solid Nut

Nut Part Number	Description	Max. Torque	List Price	Your Price
SXN-25M	SX25 Mini-Max Spanner Nut	85 ft/lbs	\$60.00	\$52.00
SXN-25MB	SX25 Mini-Max Bearing Spanner Nut	120 ft/lbs	\$89.00	\$77.14

Wrenches



Hook Spanner

Wrench Part Number	Description	Max. Torque	List Price	Your Price
MCW20	SX25 Mini Spanner Nut	88-97 ft/lbs	\$40.00	\$34.67

End Mill Adapters



Premium Performance

Premium Precision

0.0001" TIR OD Taper to ID Bore Guaranteed

Dynamic Balance

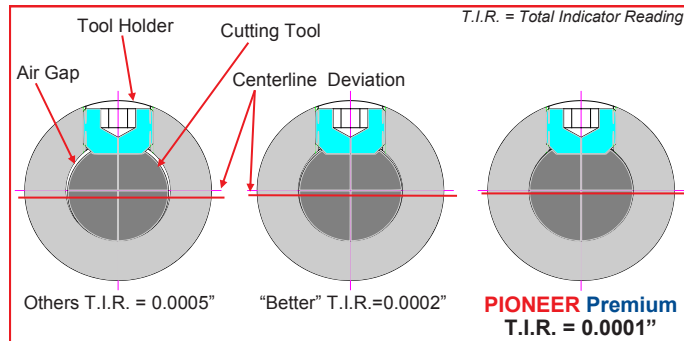
Dynamically Balanced Body for G6.3 @ 20,000 RPM's

Best in Class Performance

Pioneer EM exceeds industry standards to provide optimum performance and interchangeability

Building the Best in the Industry!

- 3 μm - 0.0001" Bore Runout Standard
- H5 Bore Tolerance Standard
- Coolant Thru Center Standard
- DIN AD+B Flange Coolant Standard
- Dynamic Balance Standard
- ID Chip Hole Standard
- Jet-Blast available on all projections



You lose 10% of cutter life for every 0.0001" of T.I.R.

Jet-Blast Coolant Option

Jet-Blast Coolant Ports allow coolant to go around solid cuttings tools and delivery coolant at the top of the cutting flutes. The coolant ports are EDM beside the bore of the end mill holder intersecting the relief behind the ground bore. Coolant is fed from the center or from DIN-B Flange Coolant into the relief and around the cutting tool.

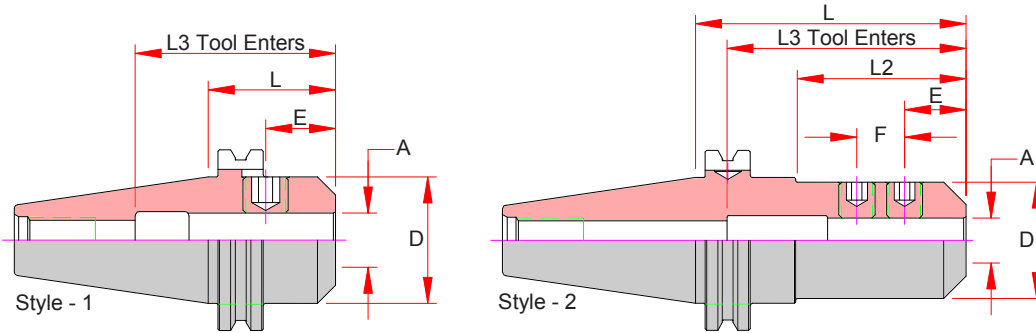
Jet-Blast is available in all holders with a 10" projection or shorter. Longer projections are a factory build and available upon request.



CAT40 End Mill Adapters

Features

- **3 µm - 0.0001" Bore Runout**
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Flange Coolant Standard
- Balanced G6.3 @ 20,000 RPM
- Add "-C" for Jet-Blast Coolant Ports

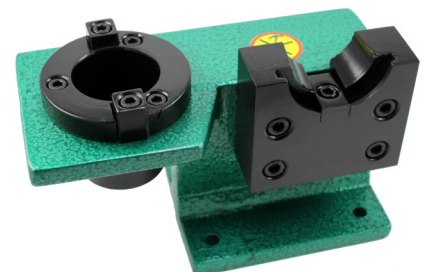


Part Number	A Bore	D	E	F	L Projection	L2	L3 Max. Tool Enters	Style	List Price	Your Price
CAT40-EM012-0250	0.1250	0.69	0.19	-	2.50	0.92	4.07	2	\$85.00	\$56.67
CAT40-EM012-0400	0.1250	1.00	0.19	-	4.00	2.42	5.57	2	\$119.00	\$79.34
CAT40-EM018-0250	0.1875	0.69	0.44	-	2.50	0.92	4.07	2	\$85.00	\$56.67
CAT40-EM018-0400	0.1875	1.00	0.44	-	4.00	2.42	5.57	2	\$119.00	\$79.34
CAT40-EM025-0250	0.2500	0.88	0.44	-	2.50	0.92	4.07	2	\$85.00	\$56.67
CAT40-EM025-0400	0.2500	1.00	0.44	-	4.00	2.42	5.57	2	\$99.00	\$66.00
CAT40-EM031-0250	0.3125	1.00	0.44	-	2.50	0.92	4.07	2	\$95.00	\$63.34
CAT40-EM031-0400	0.3125	1.00	0.44	-	4.00	2.42	5.57	2	\$110.00	\$73.34
CAT40-EM037-0250	0.3750	1.00	0.75	-	2.50	1.00	4.07	2	\$85.00	\$56.67
CAT40-EM037-0400	0.3750	1.00	0.75	-	4.00	2.50	5.57	2	\$99.00	\$66.00
CAT40-EM050-0250	0.5000	1.25	0.88	-	2.50	1.00	4.07	2	\$85.00	\$56.67
CAT40-EM050-0400	0.5000	1.25	0.88	-	4.00	2.58	5.57	2	\$105.00	\$70.00
CAT40-EM062-0250	0.6250	1.50	0.94	-	2.50	1.70	3.62	2	\$85.00	\$56.67
CAT40-EM062-0400	0.6250	1.50	0.94	-	4.00	2.50	3.50	2	\$105.00	\$70.00
CAT40-EM075-0250	0.7500	1.75	1.00	-	2.50	1.70	3.94	2	\$90.00	\$60.00
CAT40-EM075-0400	0.7500	1.75	1.00	-	4.00	3.20	3.94	2	\$105.00	\$70.00
CAT40-EM100-0175	1.0000	1.75	1.12	-	1.75	0.95	2.38	1	\$95.00	\$63.34
CAT40-EM100-0400	1.0000	2.00	1.12	1.00	4.00	3.24	4.50	2	\$95.00	\$63.34

Locking Fixtures

- Bolts to Workbench
- Easy Access to Retention Knob

Purchase 10 holders from this flyer and receive this locking fixture for only \$50.00!



Part Number	Shank	List Price	Your Price
TLD-CAT40	Cat40	\$200.00	\$133.34

Shell Mill Adapters



Shown body mounted with Shell Mill and Inserts not included.

FX Premium Performance

Dynamic Balance

Dynamically Balanced Body for
G6.3 @ 20,000 RPM's (CAT50 @ 15,000)

Best in Class Performance

Pioneer SM exceeds industry standards to provide optimum performance and interchangeability

More Standard Features!

- Body - Coolant Thru the Center
- DIN AD+B Flange Coolant in all Models
- Dynamic Balance Standard
- ID Chip Hole Standard
- Replaceable Keys



Optional

- FX High Volume Coolant System for Ported Cutter Bodies

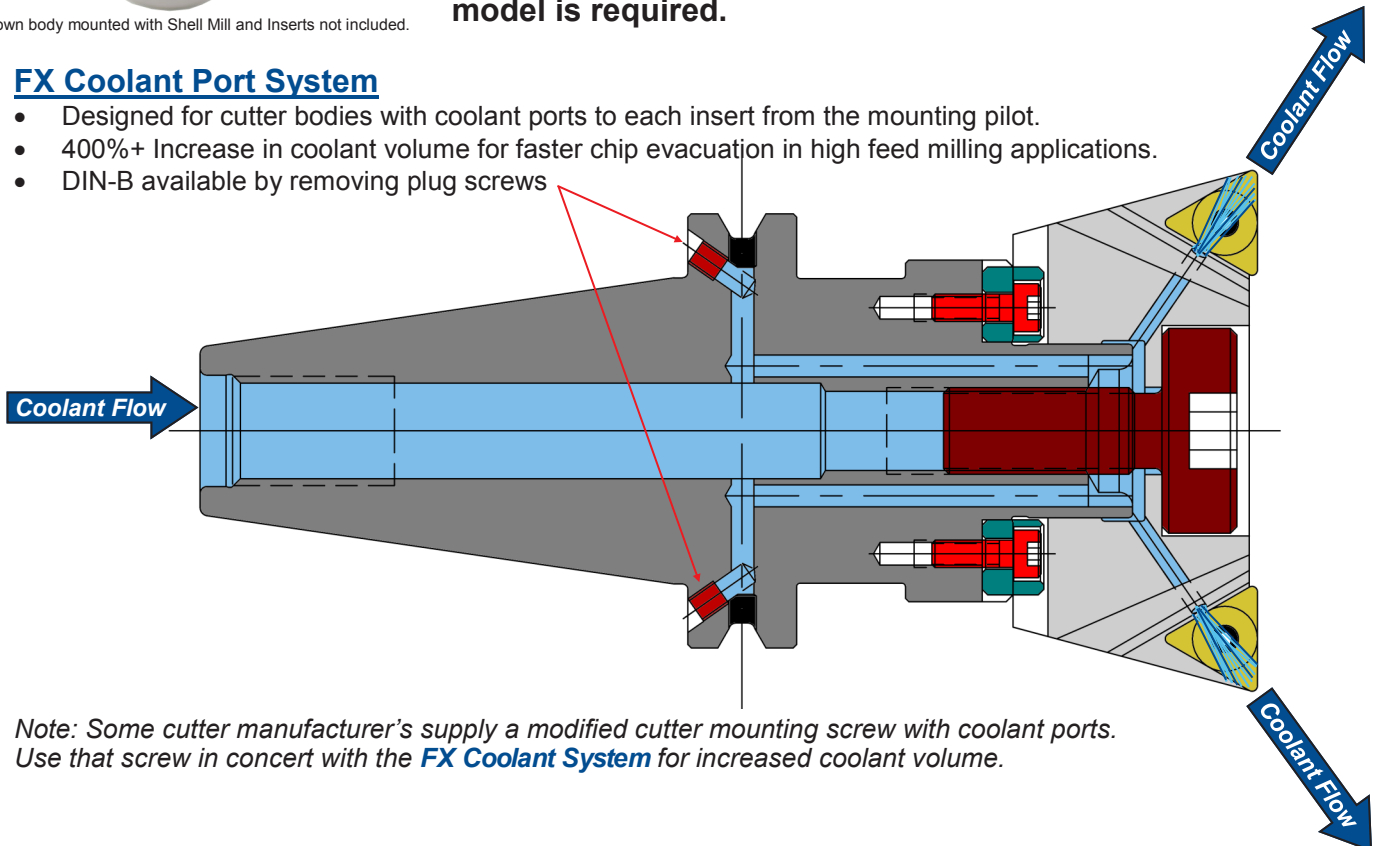
Did your cutter company supply a coolant screw?

Use our standard holder for coolant through the modified screw - or - use our FX model for additional coolant flow!

The standard model is designed for non-coolant and coolant screw applications. For ported cutters, coolant holes to the insert from the pilot of the holder, the FX model is required.

FX Coolant Port System

- Designed for cutter bodies with coolant ports to each insert from the mounting pilot.
- 400%+ Increase in coolant volume for faster chip evacuation in high feed milling applications.
- DIN-B available by removing plug screws

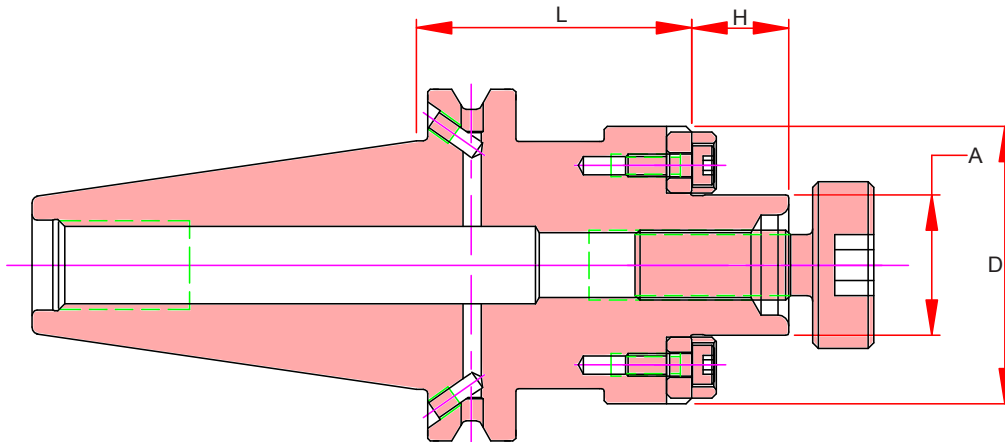


Note: Some cutter manufacturer's supply a modified cutter mounting screw with coolant ports. Use that screw in concert with the **FX Coolant System** for increased coolant volume.

CAT40 Shell Mill Adapters

Features

- Body - Coolant Thru Center for modified screws
- DIN AD+B Flange Coolant Standard
- Balanced G6.3 @ 20,000 RPM
- FX Coolant option available, see chart below



Standard Non-Coolant (Works with Cutter MFG Supplied Coolant Screws)

Pilot Size	Part Number	A Pilot	D	H	L Projection	Drive Key Size	Mounting Screw Thread	List Price	Your Price
3/4	CAT40-SM075-0175	0.75	1.75	0.69	1.75	0.312	3/8-24	\$112.00	\$74.67
1"	CAT40-SM100-0200	1.00	1.97	0.69	2.00	0.375	1/2-20	\$112.00	\$74.67

FX Ported Coolant (Works with Insert Pocket Coolant Ported Cutter Bodies)

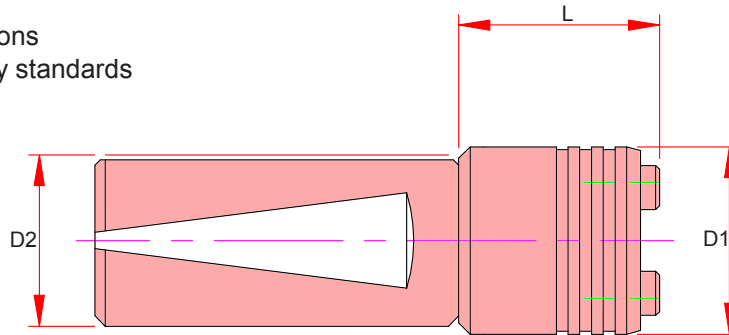
Pilot Size	Part Number	A Pilot	D	H	L Projection	Drive Key Size	Mounting Screw Thread	List Price	Your Price
3/4	CAT40-SM075-0175F	0.75	1.75	0.69	1.75	0.312	3/8-24	\$162.00	\$108.00
1"	CAT40-SM100-0200F	1.00	1.97	0.69	2.00	0.375	1/2-20	\$162.00	\$108.00

Tap Holders

RT Rigid - Straight Shank

Features:

- Flats for Lathe Applications
- Compatible with industry standards

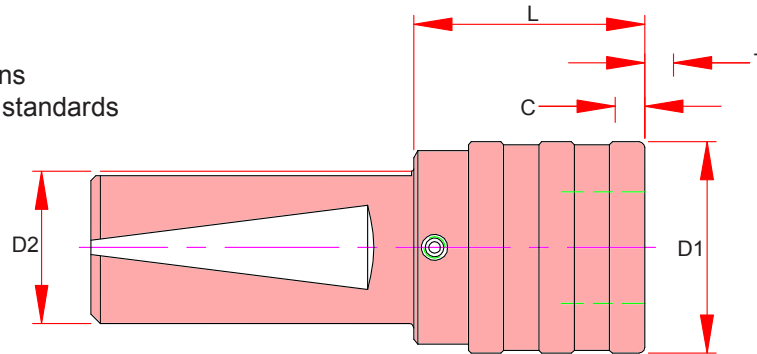


Adapter Size	Part Number	Capacity	D1	D2	L Projection	List Price	Your Price
1	S100-RT1-0158	#6 - 9/16	1.34	1"	1.57	\$163.00	\$108.67

TC - Straight Shank

Features:

- Non Coolant
- Flats for Lathe Applications
- Compatible with industry standards



Adapter Size	Part Number	Capacity	D1	D2	L Projection	T - TENSION	C - COMP.	List Price	Your Price
1	S100-TC1-0158	#6 - 9/16	1.42	1"	1.57	0.30	0.30	\$280.00	\$186.67

RA - Rigid Tap Adapters

Features:

- Direct Drive for Rigid Tapping
- Bilz Quick Change Compatible
- Push to load / release system for quick tool change



ANSI Tap Size	Metric	Shank"	Shank MM	Square"	Square MM	SIZE 1	List Price	Your Price
#0 - #6	M1.6	0.141	3.58	0.110	2.79	RA1U-0141	\$31.00	\$20.67
#8	M4	0.168	4.27	0.131	3.33	RA1U-0168	\$31.00	\$20.67
#10	M4.5, M5	0.194	4.93	0.152	3.86	RA1U-0194	\$31.00	\$20.67
#12		0.220	5.59	0.165	4.19	RA1U-0220	\$31.00	\$20.67
1/4	M6, M6.3	0.255	6.48	0.191	4.85	RA1U-0255	\$31.00	\$20.67
5/16	M7, M8	0.318	8.08	0.238	6.05	RA1U-0318	\$31.00	\$20.67
3/8	M10	0.381	9.68	0.286	7.26	RA1U-0381	\$31.00	\$20.67
7/16		0.323	8.20	0.242	6.15	RA1U-0323	\$31.00	\$20.67
1/2	M12, M12.5	0.367	9.32	0.275	6.99	RA1U-0367	\$31.00	\$20.67
9/16	M14	0.429	10.90	0.322	8.18	RA1U-0429	\$31.00	\$20.67
PIPE TAP								
1/8 PIPE SS		0.313	7.95	0.234	5.94	RA1U-0313	\$31.00	\$20.67
1/8 PIPE LS		0.438	11.13	0.328	8.33	RA1U-0438	\$31.00	\$20.67

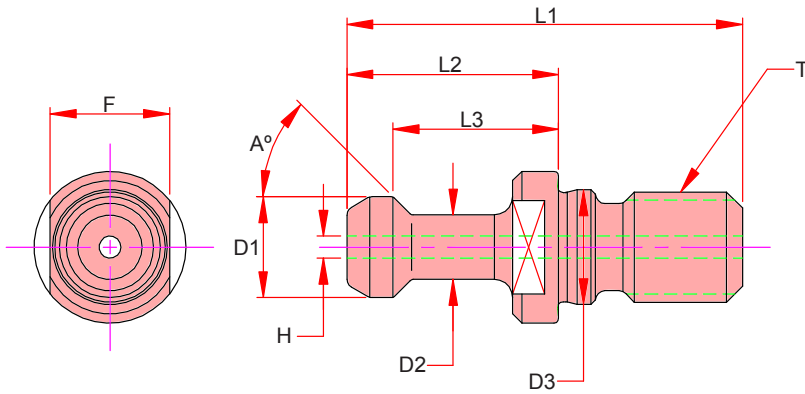
Retention Knobs

Features

- Manufactured to the Industry Standards or machine builders specifications.

Note:

- Please specify dimension and machine make and model when inquiring on pull studs.
- It is critical that the correct retention knob is used with each machining center. Please verify all dimensions prior to ordering. Machine specifications will be located in your machine manual.**



Part Number	A Angle	D1 Head	D2 Neck	D3 Pilot	L1 OAL	L2 Proj.	L3 - Pull Loc.	H Hole	F Flats	T Thread	Notes	List Price	Your Price
CAT40	HPS-72C	45	0.591	0.394	0.641	2.250	1.266	0.990	0.120	19mm	MAS P40T-1 Coolant	\$22.00	\$14.67
	HPS-D72	45	0.740	0.490	-	1.500	0.640	0.440	0.283	5/8-11	ANSI B5. 50-1985	\$22.00	\$14.67

California Sales & Warehouse

Technical Tooling & Gage

2898 Fortune Way Suite F, Vista, CA 92081

P:760.727.3650 | F:760.727.3816

E: calsales@pioneer-na.com

Office Hours 8:30 - 4:30 PST

Headquarters

PIONEER N.A.

641 Fargo Ave, Elk Grove Village, IL 60007

P:847.593.6000 | F:800.930.6436

E: sales@pioneer-na.com

Office Hours 8:00 - 5:00 CST