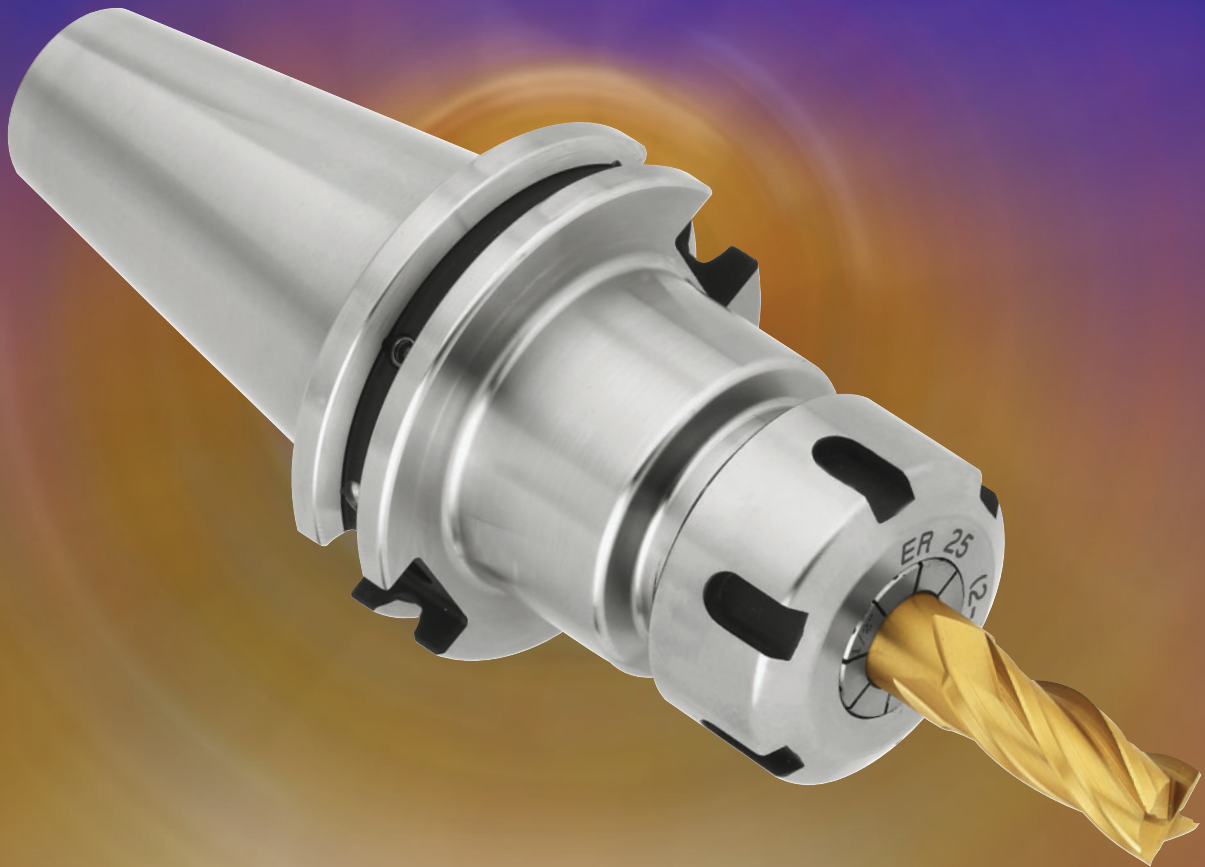




www.hpiamerica.com

Next Generation ER



Model nos.

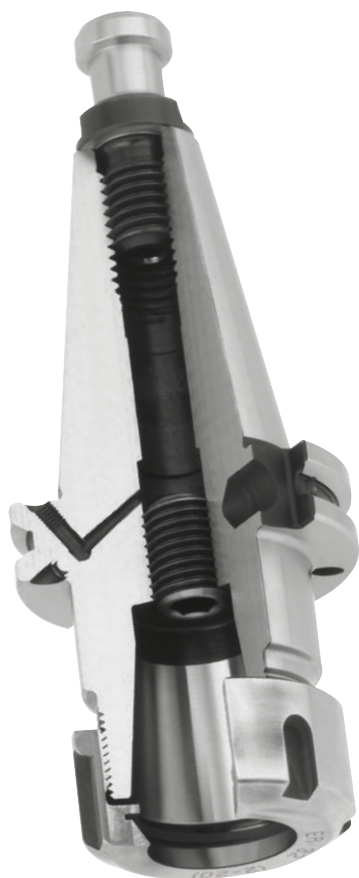
CAT40-ER16-60 SG
CAT40-ER16-100 SG
CAT40-ER32-75 SG
CAT40-ER32-100 SG

Next Generation ER

- Balance G2.5 at 20,000 R.P.M.
- Balanced nut standard
- Balance certificate in every box
- DIN coolant hole standard
- Through hole depth adjustable screw standard
- Guaranteed 0.0004" T.I.R.
- Thick large diameter neck
- Ready for Balluff® BIS C-122 I.D. chip

Next Generation Features To Assure Your Success

Accurate, Affordable, Available



Balance G2.5 at 20,000 rpm

The Next Generation ER is balanced G2.5 at 20,000 rpm to satisfy increasing requests for high-speed machining from the industry these days.

Balanced Nut Standard

Nut is also balanced to minimize unbalance at the nose.

Balance Certificate in Every Box

Every single Next Generation ER holder is supplied with balance certificate in the box.

DIN Coolant Hole Standard

The next generation ER has DIN coolant holes (Form AD + B) with plug set screws. Just unplug the set screws when you need flange-through coolant application.

Through Hole Depth Adjustable Screw Standard

Coolant through the center of the spindle is available as standard.

Guaranteed 0.0004" T.I.R.

Thick Large Diameter Neck

Extra rigidity for heavier duty operations.

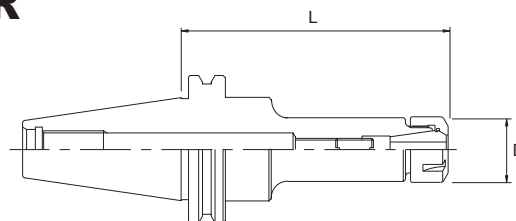
Ready for Balluff® BIS C-122 I.D. Chip



Next Generation ER

High Speed Tool Holders

- Balance G2.5 at 20,000 R.P.M.
- DIN coolant hole standard
- Guaranteed 0.0004" T.I.R.



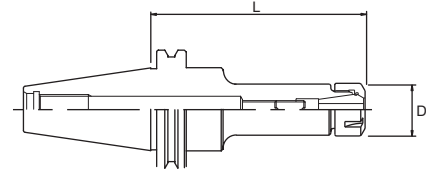
Order Number	Range	D	L	Collet
CAT40-ER16-60 SG	0.020 ~ 0.394	1.26	2.36	ER16
CAT40-ER16-100 SG	0.020 ~ 0.394	1.26	3.94	ER16
CAT40-ER32-75 SG	0.039 ~ 0.787	1.97	2.95	ER32
CAT40-ER32-100 SG	0.039 ~ 0.787	1.97	3.94	ER32

ER

Precision Collet Chuck

Feature

- Fine run-out and flexibility
- Coolant through the center standard
- High speed type available upon request
- See P.16 - 17 for Next Generation ER



Shank	Order No.	Range	L	D	Collet	Nut	Wrench	
CAT40	CAT40-ER11-60*	.020-.276	2.36	0.75	ER11	ERN-11	ERW-11	
	CAT40-ER11-100*	.020-.276	3.94	0.75	ER11	ERN-11	ERW-11	
	CAT40-ER11-150*	.020-.276	5.91	0.75	ER11	ERN-11	ERW-11	
	CAT40-ER16- 60	.020 - .394	2.36	1.24	ER16	ERN-16	ERW-16	
	CAT40-ER16-100	.020 - .394	3.94	1.24	ER16	ERN-16	ERW-16	
	CAT40-ER16-150	.020 - .394	5.91	1.24	ER16	ERN-16	ERW-16	
	CAT40-ER20- 75	.020 - .512	2.95	1.38	ER20	ERN-20	ERW-20	
	CAT40-ER20-100	.020 - .512	3.94	1.38	ER20	ERN-20	ERW-20	
	CAT40-ER20-150	.020 - .512	5.91	1.38	ER20	ERN-20	ERW-20	
	CAT40-ER25- 75	.020 - .630	2.95	1.65	ER25	ERN-25	ERW-25	
	CAT40-ER25-100	.020 - .630	3.94	1.65	ER25	ERN-25	ERW-25	
	CAT40-ER25-150	.020 - .630	5.91	1.65	ER25	ERN-25	ERW-25	
	CAT40-ER32- 75	.039 - .787	2.95	1.96	ER32	ERN-32	ERW-32	
	CAT40-ER32-100	.039 - .787	3.94	1.96	ER32	ERN-32	ERW-32	
	CAT40-ER32-150	.039 - .787	5.91	1.96	ER32	ERN-32	ERW-32	
	CAT40-ER40- 75*	.079 - 1.181	2.95	2.48	ER40	ERN-40	ERW-40	
	CAT40-ER40-100*	.079 - 1.181	3.94	2.48	ER40	ERN-40	ERW-40	
	CAT50	CAT50-ER16- 75	.020 - .394	2.95	1.24	ER16	ERN-16	ERW-16
		CAT50-ER16-105	.020 - .394	4.13	1.24	ER16	ERN-16	ERW-16
		CAT50-ER16-150	.020 - .394	5.91	1.24	ER16	ERN-16	ERW-16
CAT50-ER16-200*		.020 - .394	7.87	1.24	ER16	ERN-16	ERW-16	
CAT50-ER20- 75		.020 - .512	2.95	1.38	ER20	ERN-20	ERW-20	
CAT50-ER20-105		.020 - .512	4.13	1.38	ER20	ERN-20	ERW-20	
CAT50-ER20-150*		.020 - .512	5.91	1.38	ER20	ERN-20	ERW-20	
CAT50-ER25- 75		.020 - .630	2.95	1.65	ER25	ERN-25	ERW-25	
CAT50-ER25-120		.020 - .630	4.72	1.65	ER25	ERN-25	ERW-25	
CAT50-ER25-150		.020 - .630	5.91	1.65	ER25	ERN-25	ERW-25	
CAT50-ER32- 90		.039 - .787	3.54	1.96	ER32	ERN-32	ERW-32	
CAT50-ER32-120		.039 - .787	4.72	1.96	ER32	ERN-32	ERW-32	
CAT50-ER32-150		.039 - .787	5.91	1.96	ER32	ERN-32	ERW-32	
CAT50-ER40-90		.079-1.181	3.54	2.48	ER40	ERN-40	ERW-40	

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included. Please order separately.
3. Special length is available upon request.
4. DIN type flange coolant hole is available upon request.
5. See P.20 for ER collets.



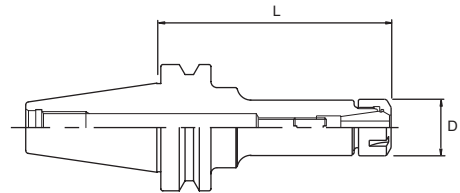
BT50-ER25-225

ER

Precision Collet Chuck

Feature

- Fine run-out and flexibility
- Coolant through the center standard
- High speed type available upon request
- See P.16 - 17 for Next Generation ER

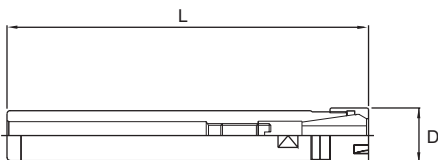


Shank	Order No.	Range	L	D	Collet	Nut	Wrench
BT30	BT30-ER16- 70	.020 - .394	2.76	1.24	ER16	ERN-16	ERW-16
	BT30-ER16-100	.020 - .394	3.94	1.24	ER16	ERN-16	ERW-16
	BT30-ER20- 70	.020 - .512	2.76	1.38	ER20	ERN-20	ERW-20
	BT30-ER20-100	.020 - .512	3.94	1.38	ER20	ERN-20	ERW-20
	BT30-ER25- 70	.020 - .630	2.76	1.65	ER25	ERN-25	ERW-25
	BT30-ER25-100	.020 - .630	3.94	1.65	ER25	ERN-25	ERW-25
	BT30-ER32- 70	.039 - .787	2.76	1.96	ER32	ERN-32	ERW-32
BT40	BT40-ER16- 60	.020 - .394	2.36	1.24	ER16	ERN-16	ERW-16
	BT40-ER16-100	.020 - .394	3.94	1.24	ER16	ERN-16	ERW-16
	BT40-ER16-160	.020 - .394	6.30	1.24	ER16	ERN-16	ERW-16
	BT40-ER20- 70	.020 - .512	2.76	1.38	ER20	ERN-20	ERW-20
	BT40-ER20-100	.020 - .512	3.94	1.38	ER20	ERN-20	ERW-20
	BT40-ER20-160	.020 - .512	6.30	1.38	ER20	ERN-20	ERW-20
	BT40-ER25- 60	.020 - .630	2.36	1.65	ER25	ERN-25	ERW-25
	BT40-ER25-100	.020 - .630	3.94	1.65	ER25	ERN-25	ERW-25
	BT40-ER25-160	.020 - .630	6.30	1.65	ER25	ERN-25	ERW-25
	BT40-ER32- 75	.039 - .787	2.95	1.96	ER32	ERN-32	ERW-32
	BT40-ER32-100	.039 - .787	3.94	1.96	ER32	ERN-32	ERW-32
	BT40-ER32-160	.039 - .787	6.30	1.96	ER32	ERN-32	ERW-32

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included. Please order separately.
3. Special length is available upon request.
4. DIN type flange coolant hole is available upon request.
5. See P.20 for ER collets.

ER Extension



Order No.	Range	L	D	Collet	Nut	Wrench
S10-ER 8M-100	.002 - .197	3.94	0.47	ER8	ERN-8	ERW-8
S16-ER11M-140	.002 - .276	5.51	0.75	ER11	ERN-11	ERW-11

Note 1. Wrench is not included.

ER Collet

Precision Collet for ER



Spec	Range mm	Range inch	ER8	ER11
Inch		.086 - .125 (1/8)	ER 8- 1/8*	ER11- 1/8
		.148 - .187 (3/16)	ER 8- 3/16*	ER11- 3/16
		.211 - .250 (1/4)		ER11- 1/4
Metric	0.5 - 1.0	.020 - .039	ER 8- 1.0*	ER11- 1.0
	1.0 - 1.5	.039 - .059	ER 8- 1.5*	ER11- 1.5
	1.5 - 2.0	.059 - .079	ER 8- 2.0*	ER11- 2.0
	2.0 - 2.5	.079 - .098	ER 8- 2.5*	ER11- 2.5
	2.5 - 3.0	.098 - .118	ER 8- 3.0*	ER11- 3.0
	3.0 - 3.5	.118 - .138 (1/8)	ER 8- 3.5*	ER11- 3.5
	3.5 - 4.0	.138 - .157	ER 8- 4.0	ER11- 4.0
	4.0 - 4.5	.157 - .177	ER 8- 4.5	ER11- 4.5
	4.5 - 5.0	.177 - .197 (3/16)	ER 8- 5.0	ER11- 5.0
	5.0 - 5.5	.197 - .217		ER11- 5.5
	5.5 - 6.0	.217 - .236		ER11- 6.0
	6.0 - 6.5	.236 - .256 (1/4)		ER11- 6.5
	6.5 - 7.0	.256 - .276		ER11- 7.0

Note 1. Items with * mark are not regular stock items.

Spec	Range mm	Range inch	ER16	ER20	ER25	ER32	ER40
Inch		.086 - .125 (1/8)	ER16- 1/8	ER20- 1/8	ER25- 1/8	ER32- 1/8	ER40- 1/8
		.148 - .187 (3/16)	ER16- 3/16	ER20- 3/16	ER25- 3/16	ER32- 3/16	ER40- 3/16
		.211 - .250 (1/4)	ER16- 1/4	ER20- 1/4	ER25- 1/4	ER32- 1/4	ER40- 1/4
		.273 - .312 (5/16)	ER16- 5/16	ER20- 5/16	ER25- 5/16	ER32- 5/16	ER40- 5/16
		.336 - .375 (3/8)	ER16- 3/8	ER20- 3/8	ER25- 3/8	ER32- 3/8	ER40- 3/8
		.398 - .437 (7/16)		ER20- 7/16	ER25- 7/16	ER32- 7/16	ER40- 7/16
		.461 - .500 (1/2)		ER20- 1/2	ER25- 1/2	ER32- 1/2	ER40- 1/2
		.523 - .562 (9/16)			ER25- 9/16	ER32- 9/16	ER40- 9/16
		.586 - .625 (5/8)			ER25- 5/8	ER32- 5/8	ER40- 5/8
		.711 - .750 (3/4)				ER32- 3/4	ER40- 3/4
		.836 - .875 (7/8)					ER40- 7/8
		.961 - 1.00					ER40- 1*
Metric	0.5 - 1.0	.020 - .039	ER16- 1.0	ER20- 1.0*	ER25- 1.0*		
	1.0 - 2.0	.039 - .079	ER16- 2.0	ER20- 2.0	ER25- 2.0	ER32- 2.5*	
	2.0 - 3.0	.079 - .118	ER16- 3.0	ER20- 3.0	ER25- 3.0	ER32- 3.0	
	3.0 - 4.0	.118 - .157 (1/8)	ER16- 4.0	ER20- 4.0	ER25- 4.0	ER32- 4.0	ER40- 4.0
	4.0 - 5.0	.157 - .197 (3/16)	ER16- 5.0	ER20- 5.0	ER25- 5.0	ER32- 5.0	ER40- 5.0
	5.0 - 6.0	.197 - .236	ER16- 6.0	ER20- 6.0	ER25- 6.0	ER32- 6.0	ER40- 6.0
	6.0 - 7.0	.236 - .276 (1/4)	ER16- 7.0	ER20- 7.0	ER25- 7.0	ER32- 7.0	ER40- 7.0
	7.0 - 8.0	.276 - .315 (5/16)	ER16- 8.0	ER20- 8.0	ER25- 8.0	ER32- 8.0	ER40- 8.0
	8.0 - 9.0	.315 - .354	ER16- 9.0	ER20- 9.0	ER25- 9.0	ER32- 9.0	ER40- 9.0
	9.0 - 10.0	.354 - .394 (3/8)	ER16-10.0	ER20-10.0	ER25-10.0	ER32-10.0	ER40-10.0
	10.0 - 11.0	.394 - .433		ER20-11.0	ER25-11.0	ER32-11.0	ER40-11.0
	11.0 - 12.0	.433 - .472 (7/16)		ER20-12.0	ER25-12.0	ER32-12.0	ER40-12.0
	12.0 - 13.0	.472 - .512 (1/2)		ER20-13.0	ER25-13.0	ER32-13.0	ER40-13.0
	13.0 - 14.0	.512 - .551			ER25-14.0	ER32-14.0	ER40-14.0
	14.0 - 15.0	.551 - .591 (9/16)			ER25-15.0	ER32-15.0	ER40-15.0
	15.0 - 16.0	.591 - .630 (5/8)			ER25-16.0	ER32-16.0	ER40-16.0
	16.0 - 17.0	.630 - .669				ER32-17.0	ER40-17.0
	17.0 - 18.0	.669 - .709 (11/16)				ER32-18.0	ER40-18.0
	18.0 - 19.0	.709 - .748				ER32-19.0	ER40-19.0
	19.0 - 20.0	.748 - .787 (3/4)				ER32-20.0	ER40-20.0
	20.0 - 21.0	.787 - .827 (13/16)					ER40-21.0
	21.0 - 22.0	.827 - .866					ER40-22.0
22.0 - 23.0	.866 - .906 (7/8)					ER40-23.0	
23.0 - 24.0	.906 - .945 (15/16)					ER40-24.0	
24.0 - 25.0	.945 - .984					ER40-25.0	
25.0 - 26.0	.984 - 1.024 (1)					ER40-26.0	

World Wide Network

- Best quality and price from the world.
- On time delivery from the world network.

Office

USA (Chicago), Japan (Gifu), Germany (Frankfurt), Korea(Seoul)



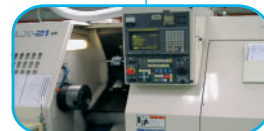
How HPI products are produced?



- Controls quality of materials.
- Carefully selected heat treatment facilities.
- Materials are subject to hardness and structure test.



- State of the art, ISO9001 certified facilities.
- Temperature controlled factories for precision manufacturing.
- Equipped with top class Japanese and German machines.



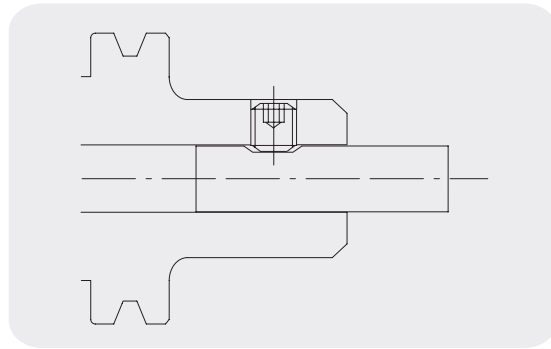
- Thorough quality control policy.
- Fully air conditioned inspection facilities.
- Precision Japanese and Swiss inspection equipments.





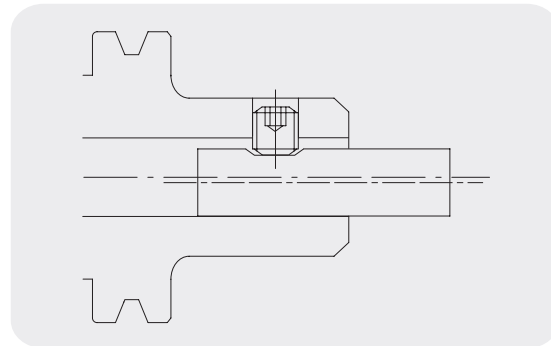
HEM end mill holders

- Tightest tolerance I.D. bore in the industry.
- Better concentricity.
- Longer cutter life.
- Finer finish.



Competitor's end mill holders

- Loose tolerance I.D. bore.
- Poor concentricity.
- Poor cutter life.
- Poor finish.



Coolant Slot (Option)

The coolant slots in the bore allow the coolant to be effectively fed around the cutter, which increase cutter life and also provides better finish.

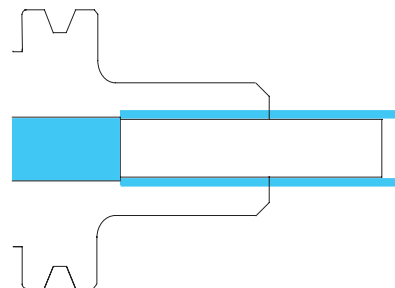


Fig.1

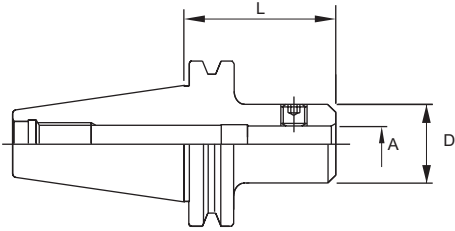
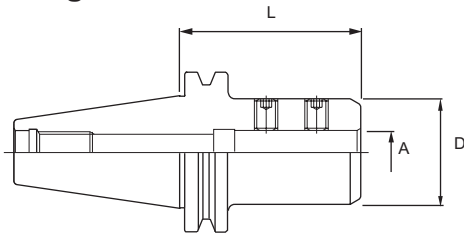


Fig.2



Shank	Order No.	A	L	D	Fig.
CAT40	CAT40-HEM 1/8 - 65	.125	2.56	0.71	1
	CAT40-HEM 1/8 -120	.125	4.72	0.71	1
	CAT40-HEM 3/16 - 65	.188	2.56	0.79	1
	CAT40-HEM 3/16 -120	.188	4.72	0.79	1
	CAT40-HEM 3/16 -150	.188	5.91	0.79	1
	CAT40-HEM 1/4 - 65	.250	2.56	0.81	1
	CAT40-HEM 1/4 -120	.250	4.72	0.79	1
	CAT40-HEM 1/4 -150	.250	5.91	0.79	1
	CAT40-HEM 5/16 - 65	.313	2.56	0.87	1
	CAT40-HEM 5/16 -120	.313	4.72	0.87	1
	CAT40-HEM 5/16 -150	.313	5.91	0.87	1
	CAT40-HEM 3/8 - 65	.375	2.56	1.00	1
	CAT40-HEM 3/8 -120	.375	4.72	1.00	1
	CAT40-HEM 3/8 -150	.375	5.91	1.00	1
	CAT40-HEM 1/2 - 45	.500	1.77	1.38	1
	CAT40-HEM 1/2 - 65	.500	2.56	1.38	1
	CAT40-HEM 1/2 -120	.500	4.72	1.38	1
	CAT40-HEM 1/2 -150	.500	5.91	1.38	1
	CAT40-HEM 5/8 - 45	.625	1.77	1.65	1
	CAT40-HEM 5/8 - 65	.625	2.56	1.65	1
	CAT40-HEM 5/8 - 95	.625	3.74	1.65	1
	CAT40-HEM 5/8 -120	.625	4.72	1.65	1
	CAT40-HEM 5/8 -150	.625	5.91	1.65	1
	CAT40-HEM 3/4 - 45	.750	1.77	1.75	1
	CAT40-HEM 3/4 - 65	.750	2.56	1.75	1
	CAT40-HEM 3/4 - 95	.750	3.74	1.75	1
	CAT40-HEM 3/4 -120	.750	4.72	1.75	1
	CAT40-HEM 3/4 -150	.750	5.91	1.75	1
	CAT40-HEM 7/8 - 85	.875	3.35	2.28	2
	CAT40-HEM 1 - 45	1.00	1.77	2.36	2
	CAT40-HEM 1 - 75	1.00	2.95	2.36	2
	CAT40-HEM 1 -100	1.00	3.94	2.36	2
	CAT40-HEM 1 -120	1.00	4.72	2.36	2
	CAT40-HEM 1 -150	1.00	5.91	2.36	2
	CAT40-HEM 1.1/4 - 50	1.25	1.97	2.48	2
	CAT40-HEM 1.1/4 -105	1.25	4.13	2.48	2
	CAT40-HEM 1.1/4 -150	1.25	5.91	2.48	2
	CAT40-HEM 1.1/2 -105	1.50	4.13	2.48	2
	CAT40-HEM 1.1/2 -150	1.50	5.91	2.48	2

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included.
3. Special size is available upon request.

Fig.1

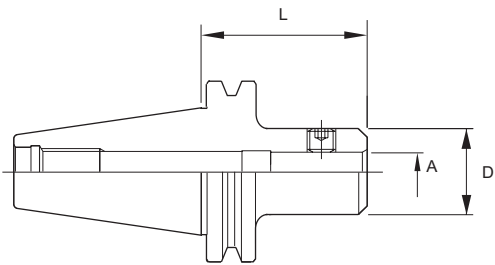
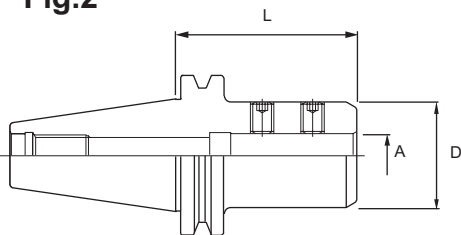


Fig.2



Shank	Order No.	A	L	D	Fig.
CAT50	CAT50-HEM 3/16 -135	.188	5.31	0.79	1
	CAT50-HEM 1/4 -135	.250	5.31	0.79	1
	CAT50-HEM 5/16 -135	.313	5.31	0.87	1
	CAT50-HEM 3/8 - 75	.375	2.95	1.00	1
	CAT50-HEM 3/8 -100	.375	3.94	1.00	1
	CAT50-HEM 3/8 -150	.375	5.91	1.00	1
	CAT50-HEM 1/2 - 75	.500	2.95	1.38	1
	CAT50-HEM 1/2 -100	.500	3.94	1.38	1
	CAT50-HEM 1/2 -150	.500	5.91	1.38	1
	CAT50-HEM 5/8 - 75	.625	2.95	1.65	1
	CAT50-HEM 5/8 -100	.625	3.94	1.65	1
	CAT50-HEM 5/8 -150	.625	5.91	1.65	1
	CAT50-HEM 3/4 - 75	.750	2.95	1.89	1
	CAT50-HEM 3/4 -100	.750	3.94	1.89	1
	CAT50-HEM 3/4 -150	.750	5.91	1.89	1
	CAT50-HEM 7/8 - 90	.875	3.54	2.28	2
	CAT50-HEM 7/8 -150	.875	5.91	2.28	2
	CAT50-HEM 1 -105	1.00	4.13	2.36	2
	CAT50-HEM 1 -150	1.00	5.91	2.36	2
	CAT50-HEM 1 -200	1.00	7.87	2.36	2
	CAT50-HEM 1.1/4 -105	1.25	4.13	2.48	2
	CAT50-HEM 1.1/4 -150	1.25	5.91	2.48	2
	CAT50-HEM 1.1/4 -200	1.25	7.87	2.48	2
	CAT50-HEM 1.1/2 -105	1.50	4.13	2.75	2
	CAT50-HEM 1.1/2 -150	1.50	5.91	2.75	2
	CAT50-HEM 2 -135	2.00	5.31	3.94	2

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included.
3. Special size is available upon request.

Fig.1

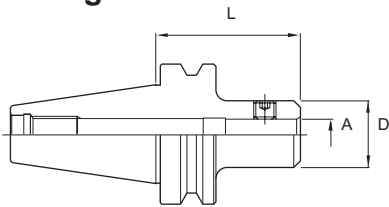
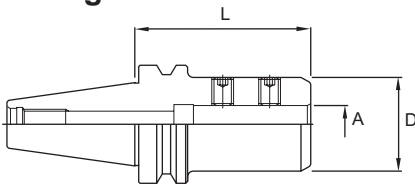


Fig.2



Shank	Order No.	A	L	D	Fig.
BT30	BT30-HEM 1/8 - 60	.125	2.36	0.71	1
	BT30-HEM 1/8 -105	.125	4.13	0.71	1
	BT30-HEM 3/16- 60	.188	2.36	0.79	1
	BT30-HEM 3/16-105	.188	4.13	0.79	1
	BT30-HEM 1/4 - 60	.250	2.36	0.79	1
	BT30-HEM 1/4 -105	.250	4.13	0.79	1
	BT30-HEM 5/16- 60	.313	2.36	0.87	1
	BT30-HEM 5/16-105	.313	4.13	0.87	1
	BT30-HEM 3/8 - 60	.375	2.36	1.00	1
	BT30-HEM 3/8 -105	.375	4.13	1.00	1
	BT30-HEM 1/2 - 60	.500	2.36	1.38	1
	BT30-HEM 1/2 -105	.500	4.13	1.38	1
	BT30-HEM 5/8 - 60	.625	2.36	1.65	1
	BT30-HEM 5/8 -105	.625	4.13	1.65	1
	BT30-HEM 3/4 - 60	.750	2.36	1.89	1
	BT30-HEM 3/4 -105	.750	4.13	1.89	1
BT40	BT40-HEM 1/8 - 65	.125	2.56	0.71	1
	BT40-HEM 1/8 -120	.125	4.72	0.71	1
	BT40-HEM 3/16 - 65	.188	2.56	0.79	1
	BT40-HEM 3/16 -120	.188	4.72	0.79	1
	BT40-HEM 1/4 - 65	.250	2.56	0.79	1
	BT40-HEM 1/4 -120	.250	4.72	0.79	1
	BT40-HEM 5/16 - 65	.313	2.56	0.87	1
	BT40-HEM 5/16 -120	.313	4.72	0.87	1
	BT40-HEM 3/8 - 65	.375	2.56	1.00	1
	BT40-HEM 3/8 -120	.375	4.72	1.00	1
	BT40-HEM 1/2 - 65	.500	2.56	1.38	1
	BT40-HEM 1/2 -120	.500	4.72	1.38	1
	BT40-HEM 5/8 - 65	.625	2.56	1.65	1
	BT40-HEM 5/8 -120	.625	4.72	1.65	1
	BT40-HEM 3/4 - 65	.750	2.56	1.89	1
	BT40-HEM 3/4 -120	.750	4.72	1.89	1
	BT40-HEM 7/8 - 85	.875	3.35	2.28	2
	BT40-HEM 1 - 85	1.00	3.35	2.36	2
	BT40-HEM 1 -120	1.00	4.72	2.36	2
BT40-HEM 1.1/4 - 85	1.25	3.35	2.48	2	
BT40-HEM 1.1/4 -120	1.25	4.72	2.48	2	
BT50	BT50-HEM 3/8 - 75	.375	2.95	1.00	2
	BT50-HEM 1/2 - 75	.500	2.95	1.50	2
	BT50-HEM 3/4 - 75	.750	2.95	1.75	2
	BT50-HEM 1 -105	1.00	4.13	2.36	2
	BT50-HEM 1.1/4-105	1.25	4.13	2.68	2

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included.
3. Special size is available upon request.