

HDC·A Collet Chucks

NT's HDC collet chucks uses a symmetrical ground design to produce the best all around chuck available. HDC collet chucks symmetrical design, and wide chucking range (5 different size chucking series) make it rigid enough to mill and drill with. Coolant through the tool applications can also be addressed with the addition of a FDC coolant collet.

High precision type

HDC·A

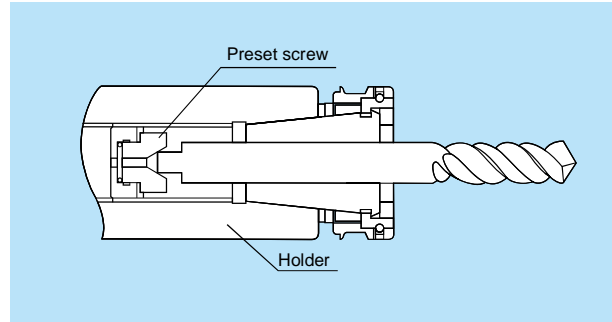


FDC Collets

Tool length adjustment

HDC-A Type

Preset screw is included in the holder. Press down on the tool shank toward the preset screw and rotate the tool for length adjustment.
(Clockwise) Tool length shortened
(Counterclockwise) Tool length extended



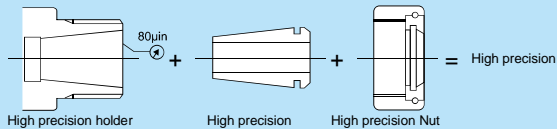
Recommended tightening torque for the cap nut

When the desired tool projection length is reached, tighten the nut with a special spanner wrench (sold separately) securely.

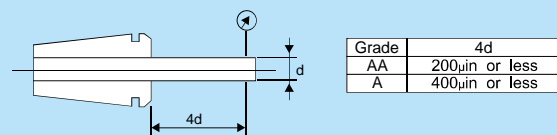
Holder size	Spanner size	Recommended torque
07A	S-0	8-11 lbf-ft (89-133 lbf-in)
09A	S-1L	22-26 lbf-ft (266-310 lbf-in)
12A	S-3L	26-30 lbf-ft (310-354 lbf-in)
16A	S-4L	30-33 lbf-ft (354-398 lbf-in)
22A	S-5L	41-44 lbf-ft (487-531 lbf-in)

Features

(1) High precision trio



(2) High precision collet

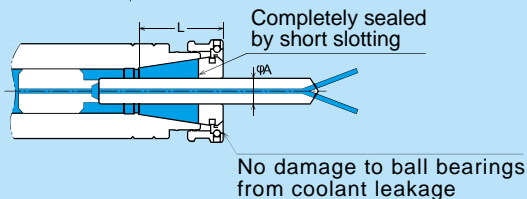


(3) High balance

HDC is designed for high balance quality, high-speed cutting is possible.

(4) Center-through coolant capable

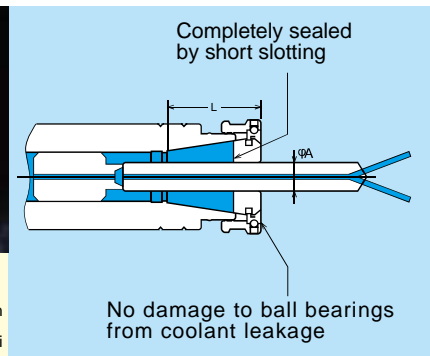
With FDC-OH or C collet, HDC can be used for center-thru coolant machines.



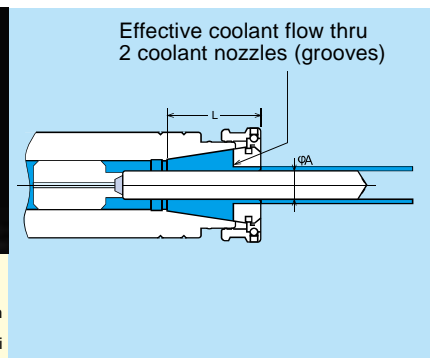
Coolant supply



Cutter with oil hole
FDC-OH type
R.P.M. 8,000rpm
Coolant 870psi
Pressure

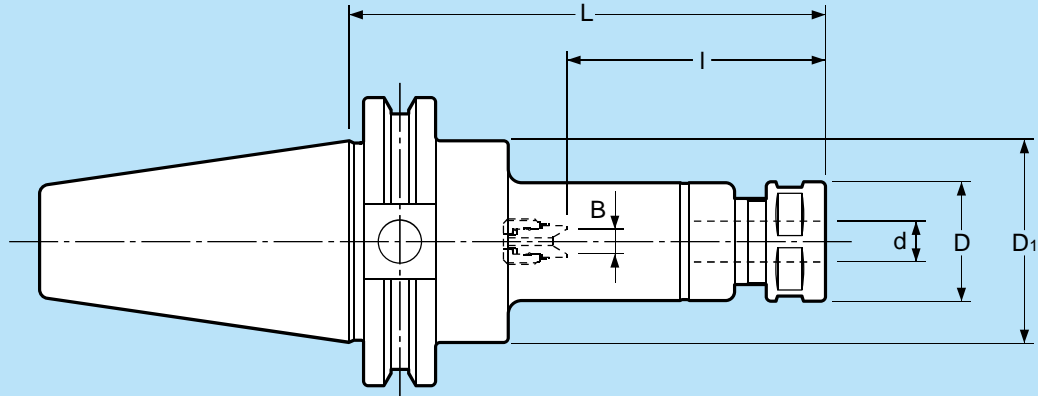


Cutter without oil hole
FDC-C type
R.P.M. 8,000rpm
Coolant 870psi
Pressure



High-Precision Collet Chucks

CAT / HDC · A



Part Number	d	L	l	B	D	D ₁	Preset Screw	Nut	Collet	Spanner	
CAT40	- 75		2.953								
	-HDC07A - 90	0.020 - 0.276	3.543	0.866 - 1.654		0.906	HDS-07	HDP-07A	FDC-07	S-0	
	-105		4.134								
	- 90		3.543		0.0 - 0.157						
	-105		4.134								
	-HDC09A -120	0.098 - 0.354	4.724	1.063 - 2.126		1.024	HDS-09	HDP-09	FDC-09	S-1L	
	-135		5.315								
	-165		6.496								
	- 90		3.543								
	-105		4.134								
	-HDC12A -120	0.098 - 0.472	4.724	1.339 - 2.598	0.0 - 0.236	1.260		HDS-12	HDP-12	FDC-12	S-3L
	-135		5.315								
-165		6.496				1.750					
-195		7.677									
- 90		3.543									
-105		4.134									
-HDC16A -120	0.138 - 0.630	4.724	1.575 - 3.071	0.0 - 0.315	1.417		HDS-16	HDP-16	FDC-16	S-4L	
-135		5.315									
-165		6.496									
-195		7.677									
-105		4.134									
-120		4.724									
-HDC22A -135	0.138 - 0.866	5.315	1.929 - 3.898	0.0 - 0.394	1.811		HDS-22	HDP-22	FDC-22	S-5L	
-165		6.496									
-195		7.677									

High-Precision Collet Chucks

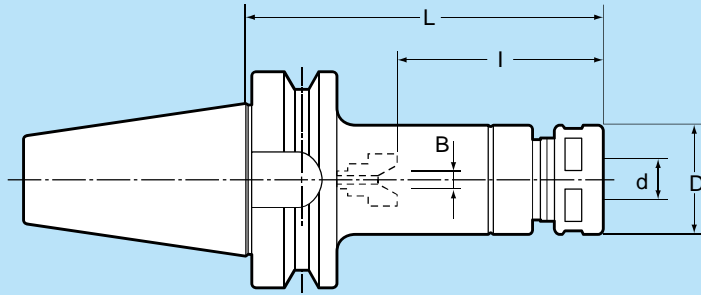
CAT / HDC • A

Part Number	d	L	I	B	D	D ₁	Preset Screw	Nut	Collet	Spanner	
CAT50	- 90	3.543									
	-105	4.134									
	-120	4.724									
	-HDC07A	0.020 - 0.276	5.315	0.866 - 1.654		0.906		HDS-07	HDP-07A	FDC-07	S-0
	-135	5.315									
	-165	6.496									
	-195	7.677									
	- 90	3.543			0.0 - 0.157						
	-105	4.134									
	-120	4.724									
	-HDC09A	0.098 - 0.354	5.315	1.063 - 2.126		1.024		HDS-09	HDP-09	FDC-09	S-1L
	-135	5.315									
	-165	6.496									
	-195	7.677									
	-225	8.858									
	-255	10.039									
	- 90	3.543									
	-105	4.134									
-120	4.724										
-HDC12A	0.098 - 0.472	5.315	1.339 - 2.598	0.0 - 0.236	1.260		HDS-12	HDP-12	FDC-12	S-3L	
-135	5.315										
-165	6.496					2.750					
-195	7.677										
-225	8.858										
-255	10.039										
- 90	3.543										
-105	4.134										
-120	4.724										
-HDC16A	0.138 - 0.630	5.315	1.575 - 3.071	0.0 - 0.315	1.417		HDS-16	HDP-16	FDC-16	S-4L	
-135	5.315										
-165	6.496										
-195	7.677										
-225	8.858										
-255	10.039										
-105	4.134										
-120	4.724										
-135	5.315										
-HDC22A	0.138 - 0.866	5.906	1.929 - 3.898	0.0 - 0.394	1.811		HDS-22	HDP-22	FDC-22	S-5L	
-150	5.906										
-165	6.496										
-195	7.677										
-225	8.858										
-255	10.039										

Ordering Example CAT40-HDC12A-120

- Collet and spanner wrench (page 55 - 61) are sold separately.

High-Precision Collet Chucks BT / HDC • A



Part Number	d	L	B	I	D	Preset Screw	Nut	Collet	Spanner
BT30	-45 -60 -75 -90 -105 0.020 - 0.276	1.772	0.0 - 0.157	0.866 - 1.457	0.906	HDS-07	HDP-07A	FDC-07	S-0
		2.362							
		2.953							
		3.543							
		4.134							
		4.134							
	-45 -75 -90 -105 0.098 - 0.354	1.772	1.063 - 1.417	1.024	HDS-09	HDP-09	FDC-09	S-1L	
		2.953							
		3.543							
		4.134							
		4.134							
		4.134							
-45 -75 -90 -105 0.098 - 0.472	1.772	0.0 - 0.236	1.339 - 2.598	1.260	HDS-12	HDP-12	FDC-12	S-3L	
	2.953								
	3.543								
	4.134								
	4.134								
	4.134								
-45 -90 -105 -120 0.138 - 0.630	1.772	0.0 - 0.315	1.575 - 3.071	1.417	HDS-16	HDP-16	FDC-16	S-4L	
	3.543								
	4.134								
	4.724								
	4.724								
	4.724								
-45 -60 -75 -90 -105 0.138 - 0.866	1.772	0.0 - 0.394	1.929 - 2.362	1.811	HDS-22	HDP-22	FDC-22	S-5L	
	2.362								
	2.953								
	3.543								
	4.134								
	4.134								
BT40	-75 -90 -105 0.020 - 0.276	2.953	0.866 - 1.654	0.906	HDS-07	HDP-07A	FDC-07	S-0	
		3.543							
		4.134							
	-90 -105 -120 -135 -165 0.098 - 0.354	3.543	0.0 - 0.157	1.063 - 2.126	1.024	HDS-09	HDP-09	FDC-09	S-1L
		4.134							
		4.724							
		5.315							
		6.496							
		6.496							
	-90 -105 -120 -135 -165 -195 0.098 - 0.472	3.543	0.0 - 0.236	1.339 - 2.598	1.260	HDS-12	HDP-12	FDC-12	S-3L
		4.134							
		4.724							
		5.315							
		6.496							
		7.677							
	-90 -105 -120 -135 -165 -195 0.138 - 0.630	3.543	0.0 - 0.315	1.575 - 3.071	1.417	HDS-16	HDP-16	FDC-16	S-4L
		4.134							
		4.724							
5.315									
6.496									
7.677									
-105 -120 -135 -165 -195 0.138 - 0.866	4.134	0.0 - 0.394	1.929 - 3.898	1.811	HDS-22	HDP-22	FDC-22	S-5L	
	4.724								
	5.315								
	6.496								
	7.677								
	7.677								

High-Precision Collet Chucks

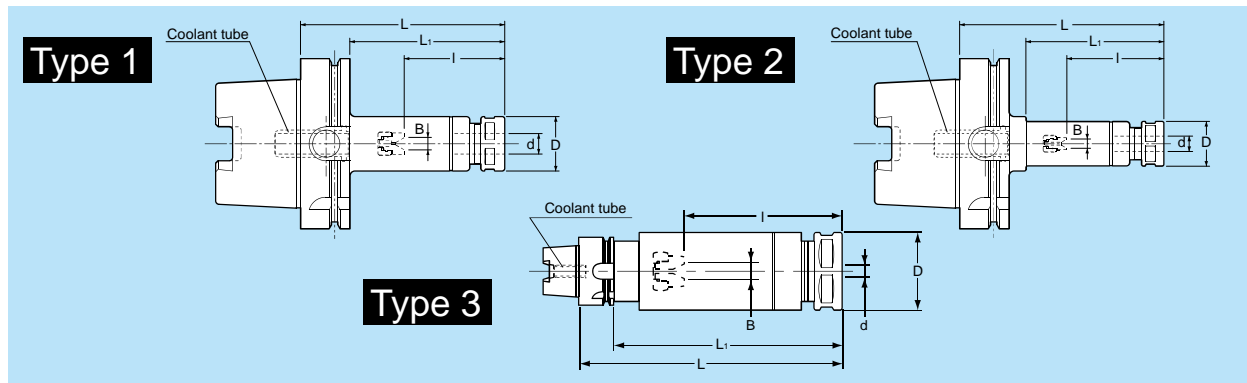
BT / HDC • A

Part Number	d	L	B	I	D	Preset Screw	Nut	Collet	Spanner				
BT50 -HDC07A	- 90	3.543				HDS07A-ES11	HDP-07A	FDC-07	S-0				
	-105	4.134											
	-120	4.724		0.866 - 1.654	0.906								
	-135	5.315											
	-165	6.496											
	-195	7.677											
	- 90	3.543								HDS-09	HDP-09	FDC-09	S-1L
	-105	4.134	0.0 - 0.157										
	-120	4.724											
	-135	5.315		1.063 - 2.126	1.024								
-165	6.496												
-195	7.677												
-225	8.858												
-255	10.039												
- 90	3.543				HDS12A-ES20	HDP-12	FDC-12	S-3L					
-105	4.134												
-120	4.724												
-135	5.315	0.0 - 0.236	1.339 - 2.598	1.260									
-165	6.496												
-195	7.677												
-225	8.858												
-255	10.039												
- 90	3.543								HDS16A-ES25	HDP-16	FDC-16	S-4L	
-105	4.134												
-120	4.724												
-135	5.315	0.0 - 0.315	1.575 - 3.071	1.417									
-165	6.496												
-195	7.677												
-225	8.858												
-255	10.039												
-105	4.134				HDS22A-ES32	HDP-22	FDC-22	S-5L					
-120	4.724												
-135	5.315												
-150	5.906	0.0 - 0.394	1.929 - 3.898	1.811									
-165	6.496												
-195	7.677												
-225	8.858												
-255	10.039												

Ordering Example BT40-HDC12A-120

- Collet and spanner wrench (page 55 - 61) are sold separately.

High-Precision Collet Chucks H S K / H D C • A



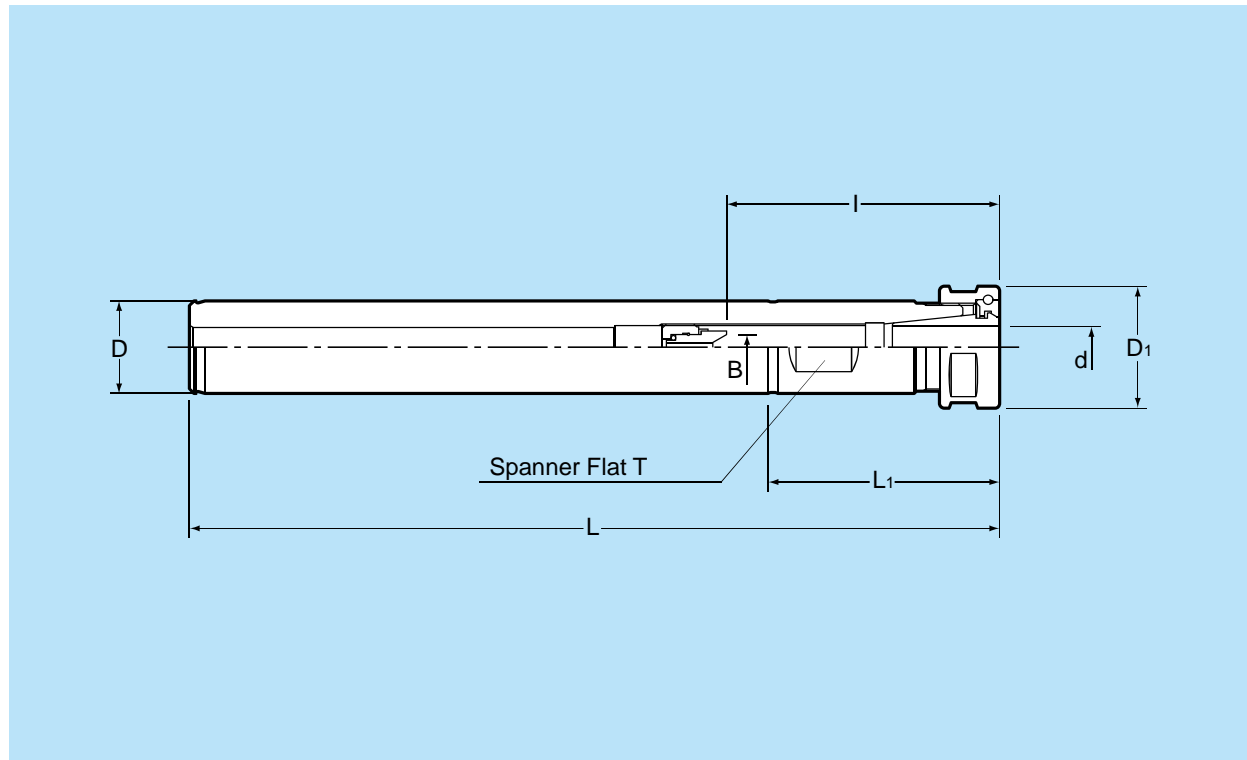
Part Number	Type	d	L	L ₁	B	l	D	Preset Screw	Nut	Collet	Spanner	
HSK40A	1	-75 -90 -120 0.020 - 0.276	2.953	2.165	0.0 - 0.157	—	0.866 - 1.378	0.906	HDS-07	HDP-07A	FDC-07	S-0
			3.543	2.756			0.866 - 1.811					
			4.724	3.937			1.063 - 1.260					
		-75 -90 -120 0.098 - 0.354	2.953	2.165			1.063 - 1.693					
			3.543	2.756			1.063 - 2.283					
			4.724	3.937			1.339 - 1.890					
	-90 -120 -150 0.098 - 0.472	3.543	2.756	1.339 - 2.795	1.260	HDS-12	HDP-12	FDC-12	S-3L			
		4.724	3.937	1.575 - 1.969								
		5.906	5.118	1.575 - 2.677								
	-90 -120 -150 0.138 - 0.630	3.543	2.756	1.575 - 3.228	1.417	HDS-16	HDP-16	FDC-16	S-4L			
		4.724	3.937	—								
		5.906	5.118	2.441								
-90 -120 -150 0.138 - 0.866	3.543	2.756	1.929 - 2.717	1.811	HDS-22	HDP-22	FDC-22	S-5L				
	4.724	3.937	1.929 - 3.898									
	5.906	5.118	—									
HSK63A	1	-75 -90 -120 0.020 - 0.276	2.953	1.929	0.0 - 0.157	—	0.866 - 1.260	0.906	HDS-07	HDP-07A	FDC-07	S-0
			3.543	2.520			0.866 - 1.654					
			4.724	3.701			1.063 - 1.220					
		-75 -90 -120 0.098 - 0.354	2.953	1.929			1.063 - 1.535					
			3.543	2.520			1.063 - 2.126					
			4.724	3.701			1.339 - 1.732					
	-90 -120 -150 0.098 - 0.472	3.543	2.520	1.339 - 2.598	1.260	HDS-12	HDP-12	FDC-12	S-3L			
		4.724	3.701	1.575 - 1.732								
		5.906	4.882	1.575 - 2.283								
	-90 -120 -150 0.138 - 0.630	3.543	2.520	1.575 - 3.071	1.417	HDS-16	HDP-16	FDC-16	S-4L			
		4.724	3.701	—								
		5.906	4.882	2.362								
-90 -120 -150 0.138 - 0.866	3.543	2.520	1.929 - 2.323	1.811	HDS-22	HDP-22	FDC-22	S-5L				
	4.724	3.701	1.929 - 3.504									
	5.906	4.882	—									
HSK100A	1	-75 -90 -120 0.020 - 0.276	2.953	1.417	0.0 - 0.157	—	1.496	0.906	HDS-07	HDP-07A	FDC-07	S-0
			3.543	2.008			0.866 - 1.654					
			4.724	3.189			1.535					
		-75 -90 -120 0.098 - 0.354	2.953	1.417			1.063 - 1.535					
			3.543	2.008			1.063 - 2.126					
			4.724	3.189			1.339 - 1.496					
	-90 -120 -150 0.098 - 0.472	3.543	2.402	1.339 - 2.205	1.260	HDS-12	HDP-12	FDC-12	S-3L			
		4.724	3.583	1.339 - 2.598								
		5.906	4.764	2.126								
	-90 -120 -150 0.138 - 0.630	3.543	2.402	1.575 - 2.283	1.417	HDS-16	HDP-16	FDC-16	S-4L			
		4.724	3.583	1.575 - 3.071								
		5.906	4.764	—								
-90 -120 -150 0.138 - 0.866	3.543	2.402	1.929 - 2.165	1.811	HDS-22	HDP-22	FDC-22	S-5L				
	4.724	3.583	1.929 - 3.110									
	5.906	4.764	—									

Ordering Example HSK63A-HDC12A-120

- Collet and spanner wrench (page 55 - 61) are sold separately.

High-Precision Collet Chucks

ST / HDC • A Straight Shank Type



■ Metric

Part Number	d	D	D ₁	L	L ₁	B	I	T	Preset Screw	Nut	Collet	Spanner
ST20-HDC09A -175	0.098 - 0.354	0.787 (20mm)	1.024	6.890	1.969	0.0 - 0.157	1.063 - 2.126	0.669 (17mm)	HDS-09	HDP-09	FDC-09	S-1L
ST32-HDC12A ⁻¹⁸⁵ -235	0.098 - 0.472	1.260 (32mm)	1.260	^{7.283} 9.252	2.008	0.0 - 0.236	1.338 - 2.598	1.142 (29mm)	HDS-12	HDP-12	FDC-12	S-3L

■ Inch

Part Number	d	D	D ₁	L	L ₁	B	I	T	Preset Screw	Nut	Collet	Spanner
ST0750-HDC09A -175	0.098 - 0.354	0.750	1.024	6.890	1.969	0.0 - 0.157	1.063 - 2.126	0.669 (17mm)	HDS-09	HDP-09	FDC-09	S-1L
ST1250-HDC12A ⁻¹⁸⁵ -235	0.098 - 0.472	1.250	1.260	^{7.283} 9.252	2.008	0.0 - 0.236	1.338 - 2.598	1.142 (29mm)	HDS-12	HDP-12	FDC-12	S-3L

Ordering Example ST0750-HDC09A-175

- Collet and spanner wrench (page 55 - 61) are sold separately.