

Coolant Inducer

NT's fluid heads deliver coolant right to the tool tip on machines without coolant through the spindle capabilities to flush out chips and improve cutting performance.

Collet chuck Type **HDC-A-CS**



Milling chuck Type **CT-CS**



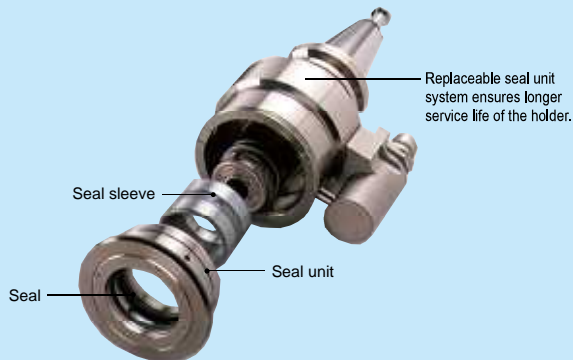
■ Features

- Delivers coolant right to the tool tip on machines without coolant through the spindle capabilities.
- Flushes out chips and improves cutting performance.
- Coolant at the tool tip extends tool life. Prevents tool breakage and flushes out troublesome heat and chips.
- NT uses multi-seal construction, sealed high speed roller bearings, and a tough corrosion resistant surface treatment for precise trouble-free operation and long life.

Specifications

Type	MAX RPM	MAX Coolant	Weight lbs
HDC-A-CS	HDC07Type 8000	290psi	BT50-HDC22Type 17.9
CT-CS	CT16Type 6000	290psi	BT50-CT32 Type 22.1

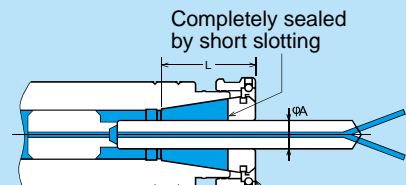
Replaceable seal unit: The seal unit can be replaced easily for quick and low-cost maintenance of the holder.



Collet Chuck Type Coolant Supply



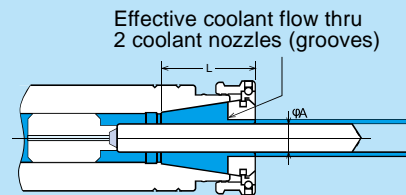
Cutter with oil hole
FDC-OH type
R.P.M. 8,000rpm
Coolant Pressure 870psi



Completely sealed by short slotting
No damage to ball bearings from coolant leakage



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

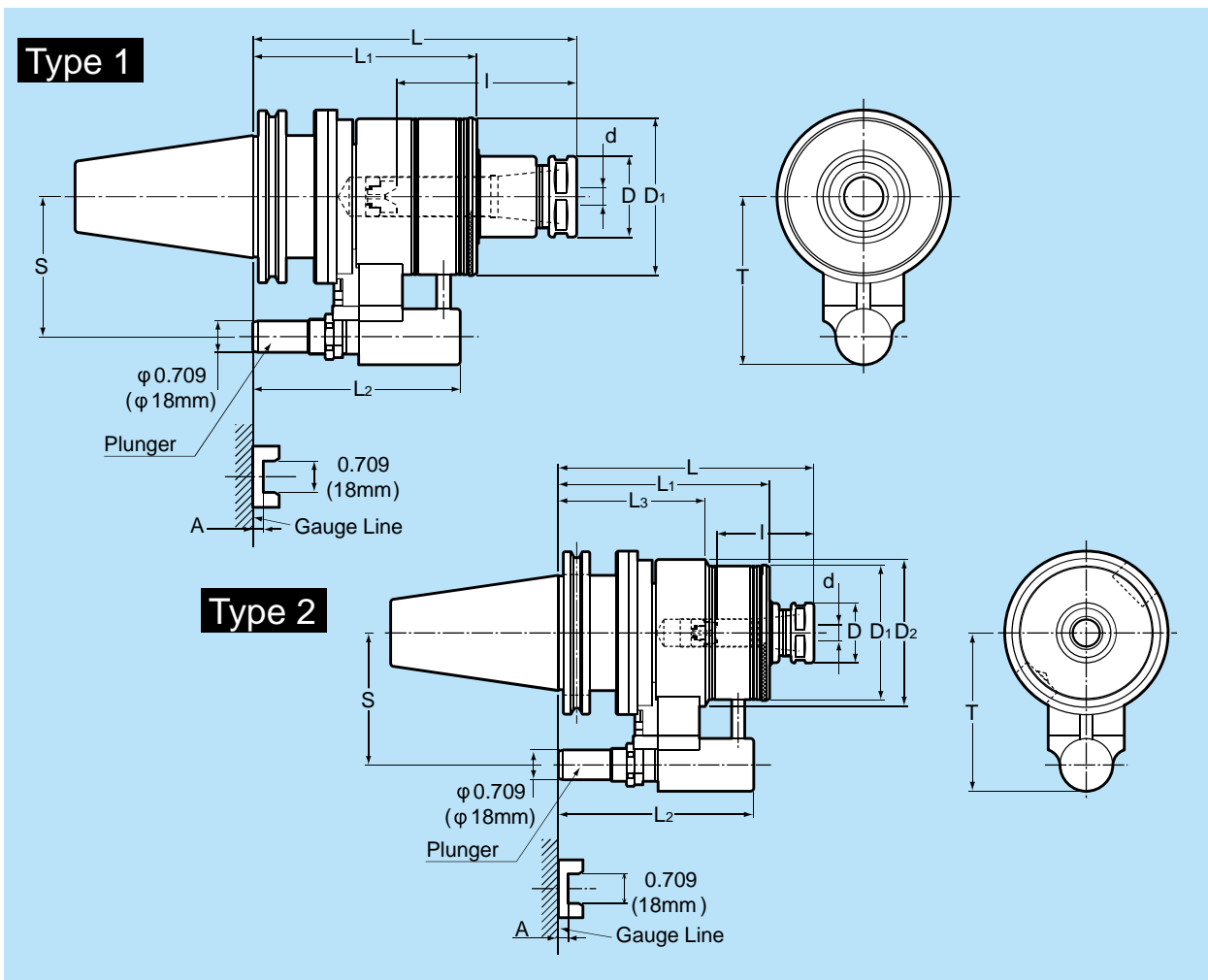


Effective coolant flow thru 2 coolant nozzles (grooves)

Actual example at our user's

Holder	Cutting conditions		Service life (Length of use)	
	Revolutions	Coolant pressure	2 4 6 8 10 12 (months)	
New type BT40-HDC16A-135CS	2,000rpm	145psi	10 months	Change of seal units
Old type BT40-CDC16-135			4 months	Seizure of bearings

Coolant Inducer CAT / HDC·A - CS



Part Number	Type	d	L	B	I	L ₁	L ₂	L ₃	D	D ₁	D ₂	T	S	MAX rpm
CAT40	-HDC16A-150CS-*	0.236 - 0.630	5.910	0.0 - 1.496 - 0.236 2.559	5.079	4.704	3.543	1.417	3.228	3.504	3.189	2.559 (65mm)	6000	
	-HDC22A-165CS-*	0.236 - 0.866	6.500	0.0 - 1.860 - 0.315 4.055	—	1.811	3.543	—	3.780	3.150 (80mm)	5000			
CAT50	-HDC16A-155CS-*	0.236 - 1.630	6.100	0.0 - 1.496 - 0.236 2.559	5.039	4.665	3.504	1.417	3.228	3.504	3.780	3.150 (80mm)	6000	
	-HDC22A-185CS-*	0.236 - 0.866	7.280	0.0 - 1.860 - 0.315 4.055	—	1.811	3.543	—	3.780	3.150 (80mm)	5000			

- Maximum coolant pressure is 290 psi (2Mpa).
- Seal Unit shown on page 173.

Type	Plunger				
	No.1	No.2	No.3	No.4	No.5
CAT40 HDC-A	A +0.398 ~ +0.787	A +0.004 ~ +0.394	A - 0.390 ~ - 0.0	A - 0.783 ~ - 0.394	A - 1.177 ~ - 0.787
CAT50 HDC-A	+0.713 ~ +1.102	+0.319 ~ +0.797	- 0.075 ~ +0.315	- 0.469 ~ +0.079	- 0.862 ~ - 0.472

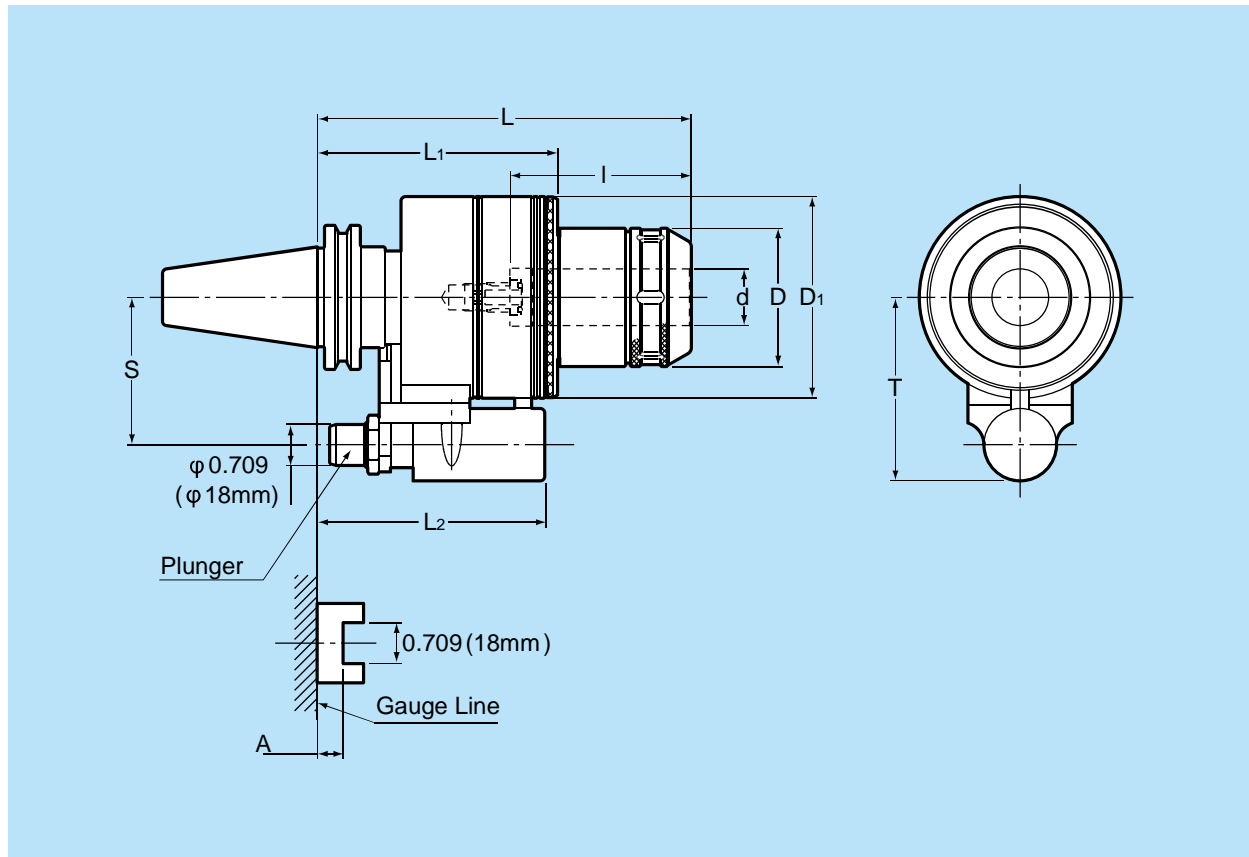
- NT standard A dimension is 0.236" (6mm).
- Positioning block shown on page 165.

Ordering Example CAT40-HDC22-165CS- *
* : Plunger No.

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

Model	Nut	Collet	Spanner
HDC16A	HDP-16	FDC-16 -OH,-C	S-4L
HDC22A	HDP-22	FDC-22 -OH,-C	S-5L

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Part Number	d	L	l	L ₁	L ₂	D	D ₁	D ₂	T	S	MAX rpm	Spanner	
CAT40	-CT0750S-195CS-*	0.750	7.677	2.756	4.923	4.549	2.047	3.543	3.504	3.189	2.559	5000	HS-2-20
	-CT1250S-195CS-*	1.250	7.677	3.150	5.039	4.587	2.874	3.937	-	3.189	(65mm)	4000	HS-3-32
CAT50	-CT0750S-200CS-*	0.750	7.874	2.756	5.039	4.665	2.047	3.543	3.504	3.780	3.150	5000	HS-2-20
	-CT1250S-200CS-*	1.250	7.874	3.150	5.118	4.665	2.874	3.937	-	3.780	(80mm)	4000	HS-3-32

- Maximum coolant pressure is 290 psi (2Mpa).

Type	Plunger				
	No.1	No.2	No.3	No.4	No.5
CAT40 CT	A	A	A	A	A
CAT50 CT	+0.909 ~ +1.299	+0.516 ~ +0.906	+0.122 ~ +0.512	- 0.271 ~ +0.118	- 0.665 ~ - 0.276

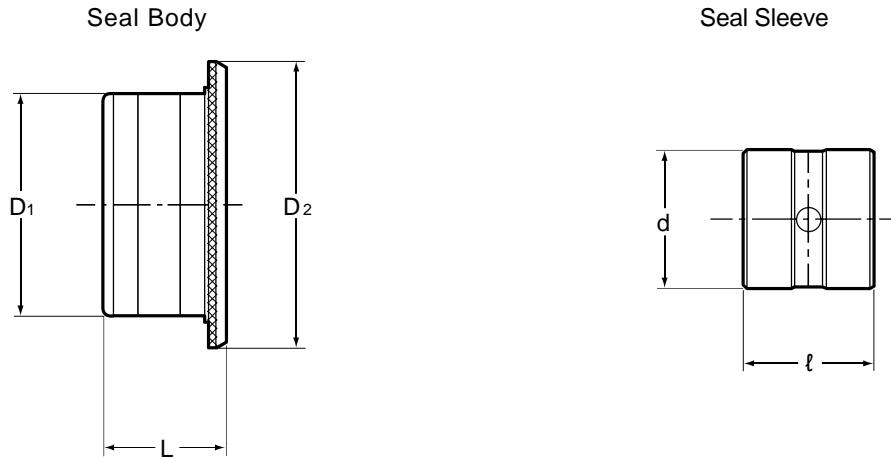
- NT standard A dimension is 0.236" (6mm).
- Positioning block shown on page 165.

Ordering Example CAT40-CT1250S-195CS- * * : Plunger No.

- Coolant collet and spanner are not included.
- Accessories are shown on page 21 - 24.

Coolant Inducer Seal Unit

1. When replacing the seal unit, please purchase both the seal body and seal sleeve.



Part Number	Body			Seal Sleeve	
	D1	D2	L	d	l
CS - 1	2.205	2.795	1.220	1.378	1.299
CS - 2	2.638	3.228		1.772	
CS - 3	2.953	3.543		2.165	

Note: Seal body and seal sleeve are made as one unit.

2. When replacing 2 seals only, please purchase a seal set as shown below.



Part Number	Seal			Seal Sleeve		
	D	L	Qty	d	l	Qty
CS - 1P	1.850	0.189	2	1.378	1.299	1
CS - 2P	2.244			1.772		
CS - 3P	2.638			2.165		

Note: A seal set consists of 2 seals and 1 seal sleeve made as 1 unit.

Note: CT•S-CS coolant inducers must be returned to NT USA for seal unit replacement.