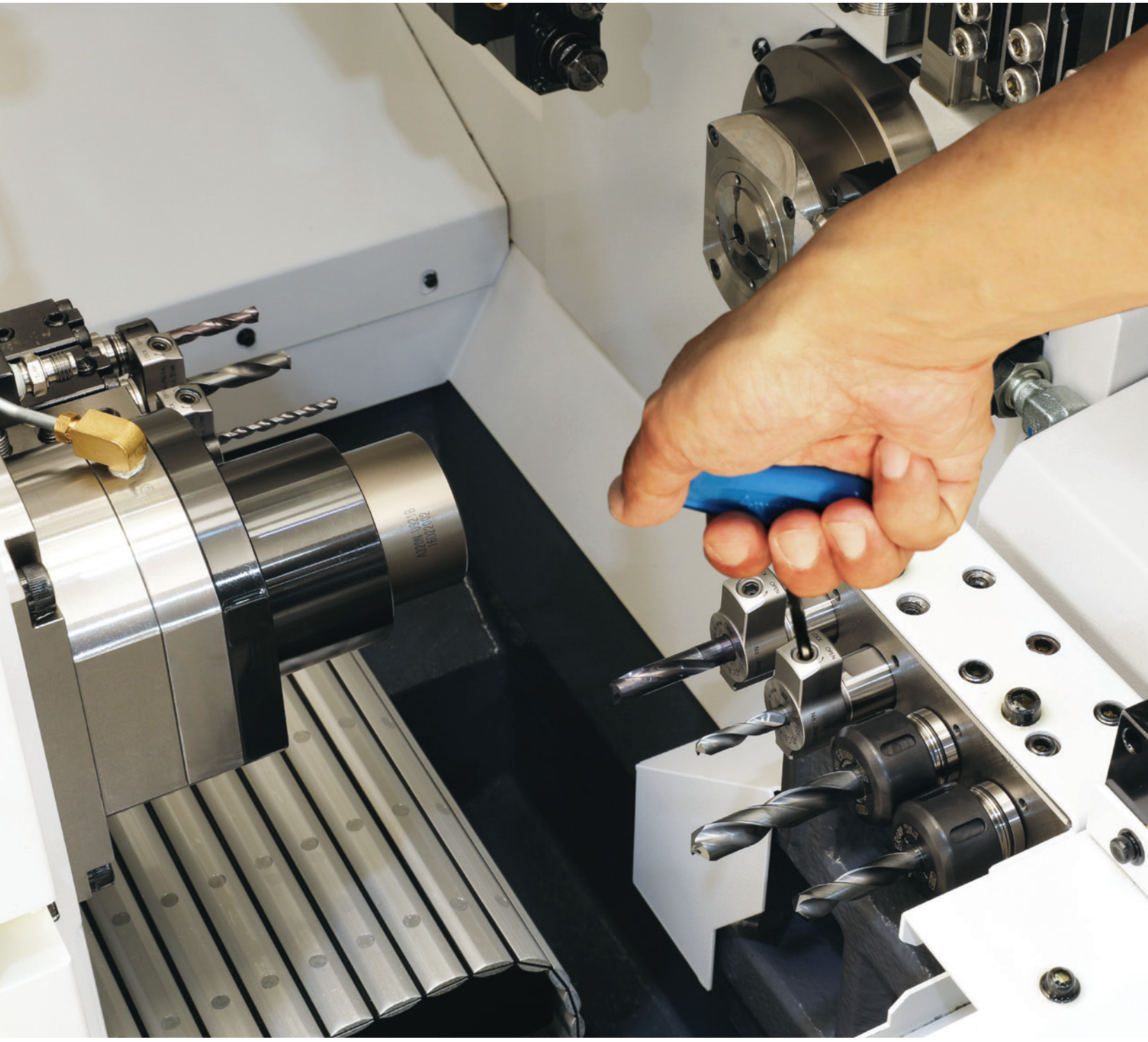
BIG DAISHOWA



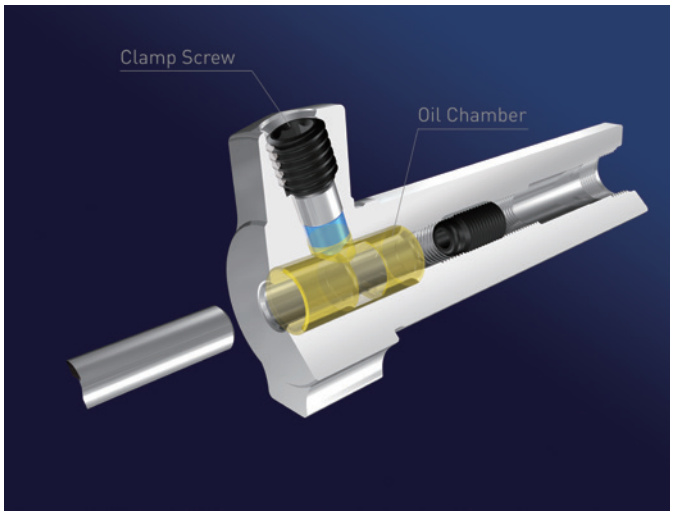
HYDRAULIC CHUCKS FOR SWISS-TYPE AUTOMATIC LATHES

HYDRAULIC CHUCKS FOR SWISS-TYPE AUTOMATIC LATHES

Hydraulic chuck system provides high accuracy and easy tool changes.

Improved Accuracy and Rigidity

The lathe type hydraulic chuck was developed from decades of knowledge accumulated on milling machines. In addition to high accuracy and rigidity, the slim design helps avoid interference with adjacent tools.



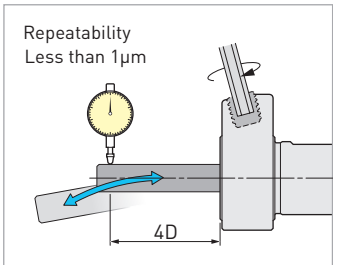
Safe and Quick Operation

The ability to change cutting tools with a single T-wrench drastically reduces the time required for tool changes.

It also reduces the need to work in extremely limited spaces and improves operator safety.

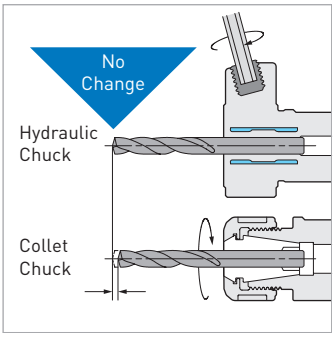
±1μm Repeatability

Even changing the tool, the repeatability at 4D is stable at ±1μm or less. In addition, the tightening is completed when the clamping screw hits the bottom, controlling tightening torque is not needed.



No Change in Tool Length

Since the tool projection length does not change after the clamping, it is easy to control the tool projection length in the machine.



THREE TYPES FOR DIFFERENT TOOL POSTS

Standard Type

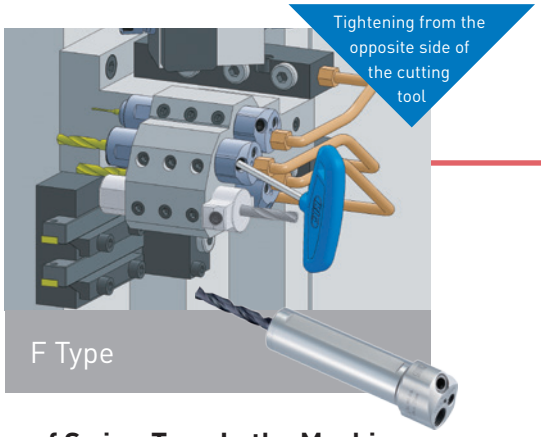
- Tighten from the tool side.
- Coolant delivery is possible with Rc(PT)1/8 screw.
- An adjusting screw can also be fitted (some models).
- Length can be adjusted by cutting the shank.
- Easy to install in various tool posts.

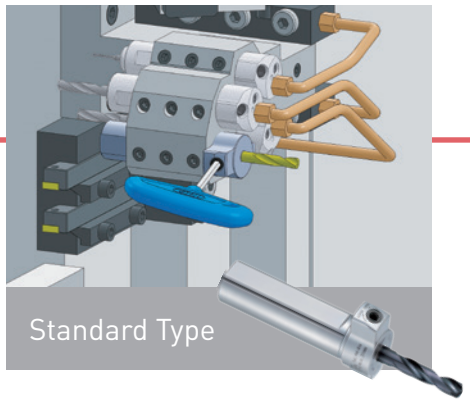
F Type

- Tighten from the opposite side of the tool.
- Coolant delivery is possible with Rc(PT)1/8 screw.
- Optimum overall length for easy use.
- Ideal for use on a front tool post.

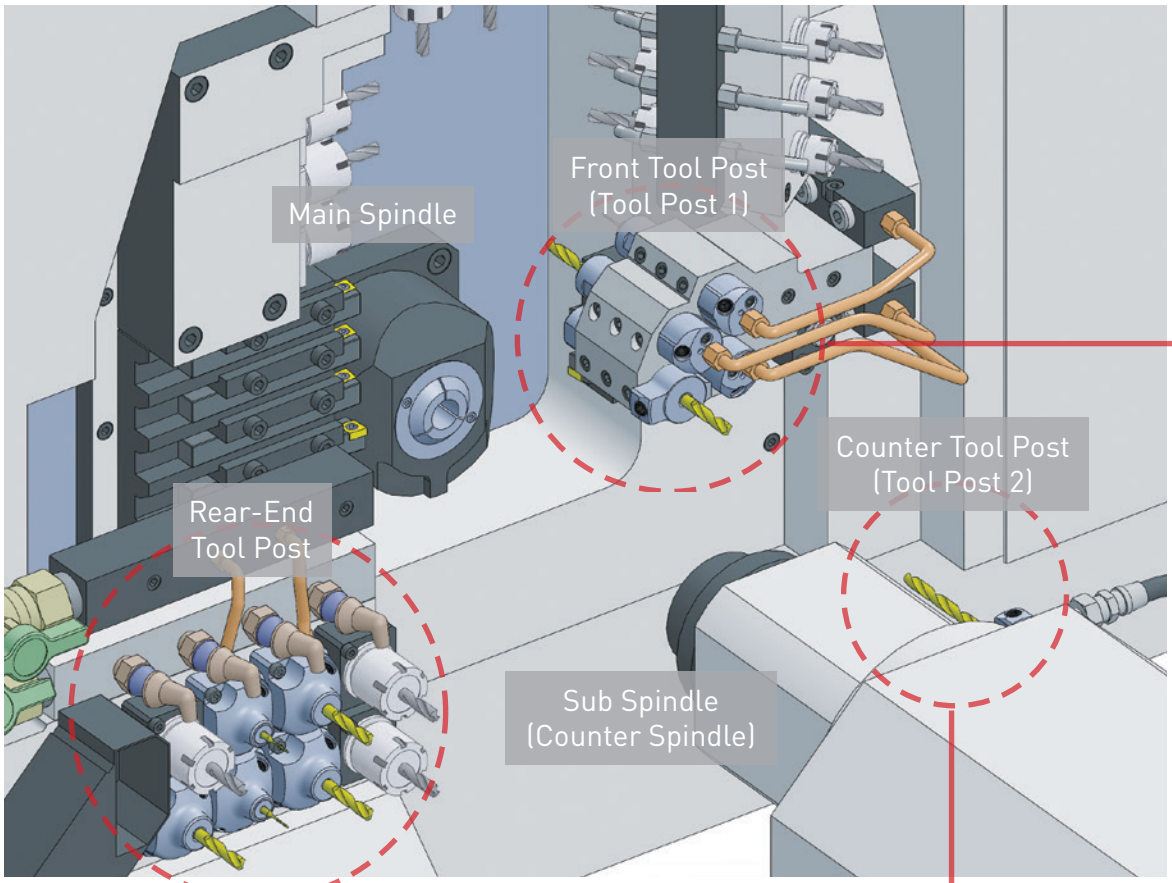
R Type

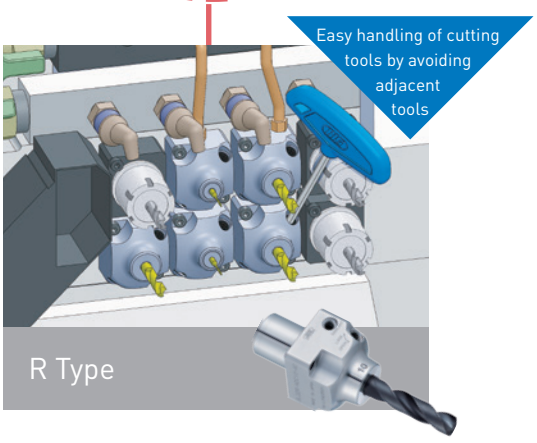
- Unique design for use with both upper and lower sections without interference.
- Tightening at an offset position in the tool side.
- Coolant delivery with M6 is possible when mounted on the upper section.

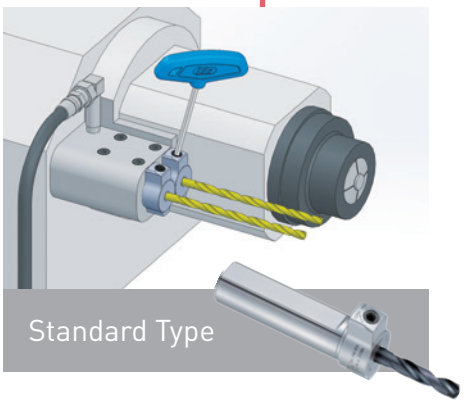




View of Swiss-Type Lathe Machine





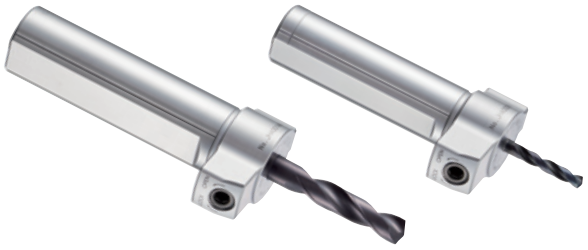


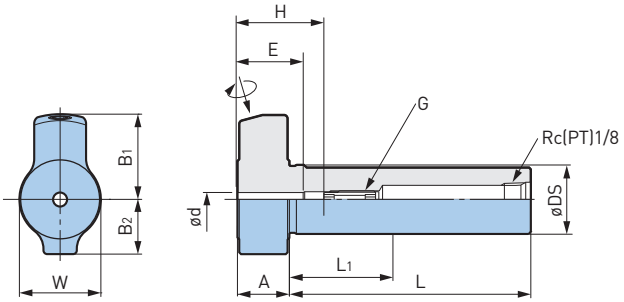
HYDRAULIC CHUCK LATHE TYPE — STANDARD TYPE

CLAMPING RANGE: ø3-12mm

COOLANT THROUGH

High-precision cutting with hydraulic chuck is achieved on an automatic lathe.





Catalog Number	ød	øDs	L	L1	A	B1	B2	W	H	E	G	Weight (lbs.)
SL19.05-HDC3-60*	3mm	.750	2.36	1.18	.59	.91	.62	.87	.787-1.26	.63	HDA4-05015W	.4
-HDC3.175-60*	.125											.4
-HDC4-60	4mm								.905-1.26	.75		.4
-HDC4.7625-60	.1875											.4
-HDC6-60	6mm								1.22-1.89	.98	NBA6B	.4
-HDC6.35-60	.250											.4
-HDC8-60	8mm					.95			2.56	1.22	—	.4
SL20-HDC3-70*	3mm	.787	2.75	1.18	.59	.91	.62	.90	.787-1.26	.63	HDA4-05015W	.5
-HDC4-70	4mm								.905-1.26	.75		.5
-HDC6-70	6mm								1.22-1.89	.98	NBA6B	.5
-HDC8-70❖	8mm					.95			2.95	1.22	—	.5
SL22-HDC3-70*	3mm	.866	2.75	1.18	.59	.91	.62	.98	.787-1.26	.63	HDA4-05015W	.6
-HDC4-70	4mm								.905-1.26	.75		.6
-HDC6-70	6mm								1.22-1.89	.98	NBA6B	.6
-HDC8-70❖	8mm					.95			2.95	1.22	—	.6
-HDC10-70❖	10mm					1.06	.66		2.76	1.30		.5
SL25-HDC3-65*	3mm	.984	2.56	1.57	.59	.91	.55	1.10	.787-1.26	.63	HDA4-05015W	.7
-HDC4-65	4mm								.905-1.26	.75		.7
-HDC6-65	6mm					.91	.59		1.22-1.89	.98	NBA6B	.7
-HDC8-65❖	8mm					.95	.63		2.76	1.22	—	.7
-HDC10-65❖	10mm					1.06	.67		2.56	1.30		.6
-HDC12-65❖	12mm					28	.71			1.42		.6
SL25.4-HDC3-80*	3mm	1.000	3.15	1.57	.59	.91	.55	1.10	.787-1.26	.63	HDA4-05015W	.8
-HDC4-80	4mm								.905-1.26	.75		.8
-HDC6-80	6mm					.91	.59		1.22-1.89	.98	NBA6B	.8
-HDC8-80❖	8mm					.95	.63		3.35	1.22	—	.8
-HDC10-80❖	10mm					1.06	.67		3.15	1.30		.7
-HDC12-80❖	12mm					1.10	.71			1.42		.7

*Some coolant comes out from the inner slots in the coolant-through application
- Adjusting screws cannot be used with models marked ❖
- Adjusting screw is adjustable both from the head and shank ends
- "E" is the min. clamping length
- "G" is the adjusting screw (optional)
- "H" indicates the adjustment length with an adjusting screw
- "H" at HDC8/10/12 is the max. tool shank length can be inserted for these models
- L_1 is the minimum length, in case of shortening the shank

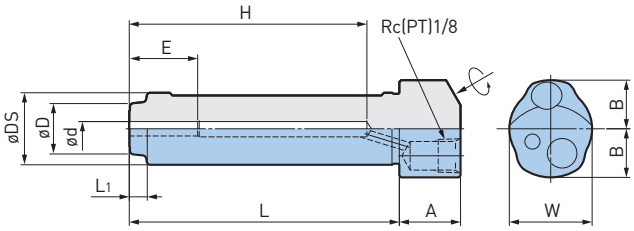
CAUTION

Use only cutting tools that have a shank tolerance of h6. Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank). Do not tighten the clamping screw without first inserting a cutting tool into the tool holder. Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E."

HYDRAULIC CHUCK LATHE TYPE — F TYPE

CLAMPING RANGE: ø3-10mm

Single wrench enables easy cutting tool change on the tool post. User-friendly rear clamping design is ideal for front tool post.

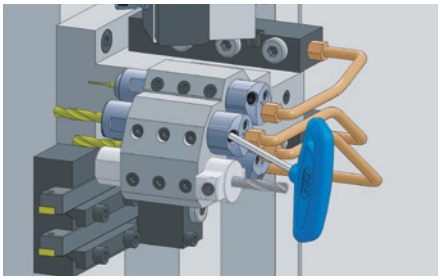


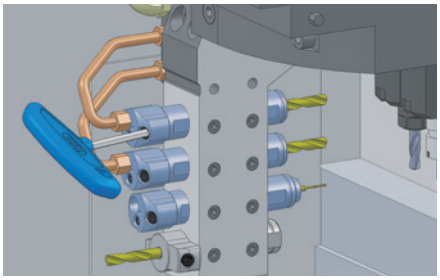
Catalog Number	ød	øD	øDS	L	L1	A	B	W	H	E	Weight (lbs)
SL19.05F-HDC3-85*	3mm	.551	.752	3.35	.20	.67	.53	.87	2.99	.63	.53
-HDC4-85	4mm									.75	
-HDC6-80	6mm	—		3.15	—				2.80	1.00	.50
-HDC8-80	8mm									1.22	.46
SL20F-HDC3-75*	3mm	.551	.787	2.95	.20	.67	.53	.91	2.60	.63	.53
-HDC4-75	4mm									.75	
-HDC6-70	6mm	—		2.76	—				2.40	1.00	.50
-HDC8-70	8mm									1.22	.46
SL22F-HDC3-75*	3mm	.551	.787	2.95	.20	.67	.53	.98	2.60	.63	.62
-HDC4-75	4mm									.75	
-HDC6-70	6mm	—		2.76	—				2.40	1.00	.57
-HDC8-70	8mm									1.22	.55
-HDC10-70	10mm									1.30	.50

*Some coolant comes out from the inner slots in coolant-through application
- Adjusting screw cannot be used
- "E" is the min. clamping length
- "H" indicates the adjustment length with an adjusting screw

F Type

- Tighten from the opposite side of the tool.
- Coolant delivery is possible with Rc(PT)1/8 screw.
- Optimum overall length for easy use.
- Ideal for use on a front tool post.





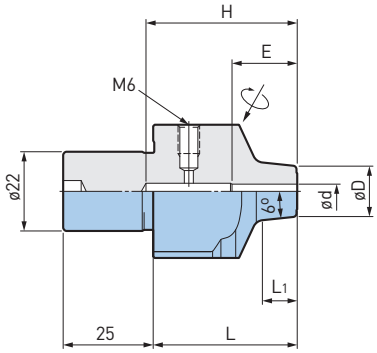
CAUTION

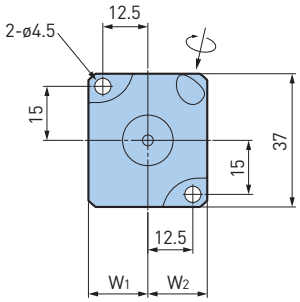
Use only cutting tools that have a shank tolerance of h6. Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank). Do not tighten the clamping screw without first inserting a cutting tool into the tool holder. Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E."

HYDRAULIC CHUCK LATHE TYPE — R TYPE

CLAMPING RANGE: ø3-10mm

Unique block design enables easy handling for both upper or lower tool post position. Oil hole drills can be used for coolant delivery with M6.



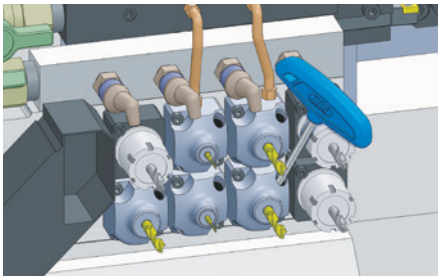


Catalog Number	ød	øD	L	L1	W1	W2	H	E	Weight (lbs)
SL22R-HDC3-40*	3mm	.551	1.57	.28	.65	.65	1.38	.63	.75
-HDC4-40	4mm			.35			1.65	.75	.73
-HDC6-40	6mm	.709		.20			2.17	1.0	.79
-HDC8 -40	8mm	.787		.24		.69	2.13	1.2	.79
-HDC10-40	10mm	.866						1.3	.77

*Some coolant comes out from the inner slots in the coolant-through application
- Adjusting screw cannot be used
- "E" is the min. clamping length

R TYPE

- Unique design for use with both upper and lower sections without interference.
- Tightening at an offset position in the tool side.
- Coolant delivery with M6 is possible when mounted on the upper section.



CAUTION

Use only cutting tools that have a shank tolerance of h6. Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank). Do not tighten the clamping screw without first inserting a cutting tool into the tool holder. Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E."