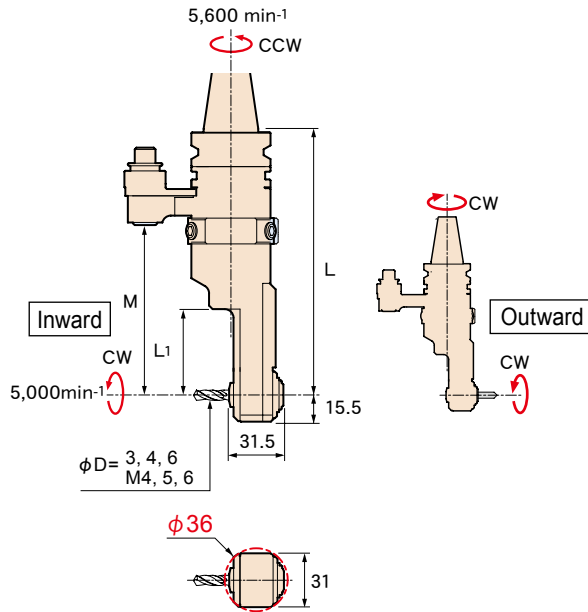


HALF mini type

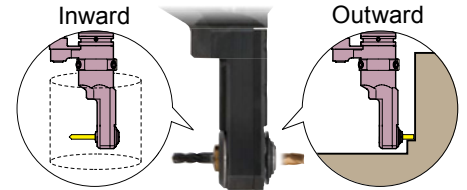


BT40-HFCS6-205



Cutter mounts in two directions

A cutting tool can be mounted both ways, inward or outward, by reassembling the angle shaft.

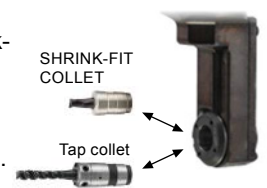


Allows maximum tool holder diameter limitation even when using a long cutting tool.

Minimal interference with face of workpiece.

Collet exchange system

Shaft exchange system for Shrink-fit collet for carbide cutter (end-mill, drill) or Tap collet for Tap.



CODE	ϕD	L	L ₁	M	
BT30 -HFCS6-155	Drill Endmill ϕ 3, 4, 6	155	50	100	1.8
BT40 -HFCS6-160		160	50	110	2.8
-205		205	95	155	3.0
BT50 -HFCS6-175	Tap M4, 5, 6	175	50	110	5.6
-220		220	95	155	5.8
DN40A-HFCS6-175	Drill Endmill ϕ 3, 4, 6	175	50	110	3.0
-220		220	95	155	3.2
DN50A-HFCS6-175	Tap M4, 5, 6	175	50	110	5.1
-220		220	95	155	5.3
CT40 -HFCS6-175	Drill Endmill ϕ 3, 4, 6	6.89"	1.97"	4.33"	6.61
-220		8.66"	3.74"	6.10"	7.28
CT50 -HFCS6-175	Tap M4, 5, 6	6.89"	1.97"	4.33"	11.24
-220		8.66"	3.74"	6.10"	11.68

Option

- Shrink-fit collet • Tap collet
- Retention knob → P.67 • Tools for assembly

Std. Access.

- Fixing spanner • Hexagonal wrench set

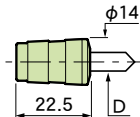
Note

- When shipping, the head direction is inward. The tool for assembly (pliers for retaining ring) is required to reassemble the collet to allow for outward positioning of the cutting tool.
- Other shanks such as HSK are also available upon request.

Caution

- The angle axis rotating direction is different due to its mounting direction, inward and outward.

Shrink-Fit Collet

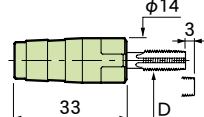


CODE	ϕD	Holding length
FCS6-3	3	11~13
-4	4	
-6	6	12~13

Caution

- The dedicated shrink-fit collet for the Angle Head Half, Mini.
- A shrink-fit heating device is required to insert and remove cutting tools.

Tap collet



CODE	ϕD	Holding length
FCS6-M4	M4	16
-M5	M5	
-M6	M6	

Note

- Tap collets meet JIS standards. We can produce ANSI standard tap collet. For more information, please contact us.

■ A product code example when ordering.

BT30-HFCS6-155 - S 65

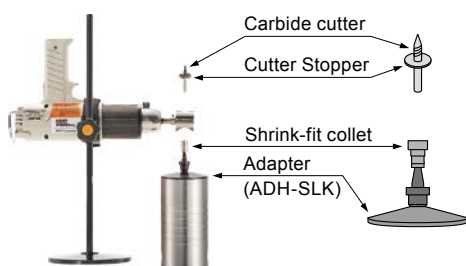
Positioning pin type

- S : Straight pin
- W : Expansion pin
- T : Taper pin

Dimension S

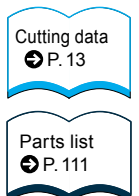
- 50, 60, 65, 80, 85, 110 ...

Procedure of cutter insertion to shrink-fit collet



Shrink-fit Heater (HRB-01)

1. Attach the shrink-fit collet to the adapter (ADH-SLK).
2. Heat the shrink-fit collet with the shrink-fit heater.
3. Attach a stopper to the carbide cutter. After finishing heating, insert the cutter to the shrink-fit collet.
4. Cool the shrink-fit collet with the shrink-fit heater.



Cutting data Angle head HALF

90° type

<p>S55C $\phi 12$ Drill</p> <p>N 670 min⁻¹ F 80 mm/min V 25.5 m/min f 0.12 mm/rev</p> <p>BT40-HFD12-120</p>	<p>S55C M12 Tap</p> <p>N 184 min⁻¹ F 322 mm/min V 7 m/min</p> <p>BT40-HFT6-120</p>	<p>S50C M6 Tap</p> <p>N 60 min⁻¹ F 120 mm/min V 3 m/min</p> <p>BT40-HFT12-135</p>	<p>S55C $\phi 10$ Endmill 2-flutes</p> <p>N 350 min⁻¹ F 50 mm/min V 11 m/min fz 0.07 mm/t</p> <p>BT40-HFD12-120</p>	<p>S50C $\phi 20$ Endmill 2-flutes</p> <p>N 158 min⁻¹ F 32 mm/min V 10 m/min fz 0.10 mm/t</p> <p>BT40-HFA20-135</p>
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UNIVERSAL type

<p>S50C $\phi 10$ Endmill 2-flutes</p> <p>N 900 min⁻¹ F 100 mm/min V 28 m/min fz 0.06 mm/t</p> <p>BT50-HUA10-150</p>	<p>S50C M8 Tap</p> <p>N 250 min⁻¹ F 312 mm/min V 6.3 m/min</p> <p>BT40-HUT4-135</p>	<p>S50C M12 Tap</p> <p>N 184 min⁻¹ F 322 mm/min V 7 m/min</p> <p>BT40-HUT6-135</p>	<p>SUS304 $\phi 10$ Drill</p> <p>N 314 min⁻¹ F 16 mm/min V 9.9 m/min f 0.05 mm/rev</p> <p>BT50-HUA10-150</p>	<p>S50C $\phi 16$ Endmill 2-flutes</p> <p>N 140 min⁻¹ F 40 mm/min V 7 m/min fz 0.14 mm/t</p> <p>BT40-HUA20-135</p>
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mini type

<p>S50C $\phi 6$ Carbide drill</p> <p>N 5000 min⁻¹ F 250 mm/min V 94 m/min f 0.05 mm/rev</p> <p>BT30-HFCS6-155</p>	<p>S50C $\phi 6$ Carbide endmill 2-flutes</p> <p>N 3500 min⁻¹ F 210 mm/min V 66 m/min fz 0.03 mm/t</p> <p>BT40-HFCS6-205</p>	<p>A7075 $\phi 6$ Carbide endmill 2-flutes</p> <p>N 5000 min⁻¹ F 300 mm/min V 94 m/min fz 0.03 mm/t</p> <p>BT30-HFCS6-155</p>
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