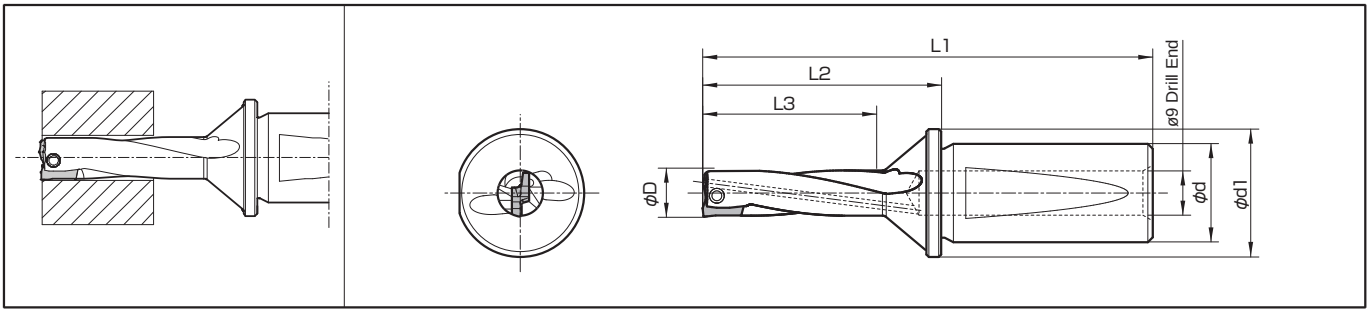
DRS

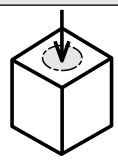
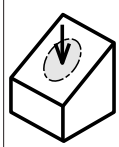
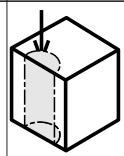
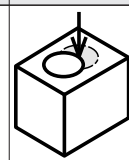
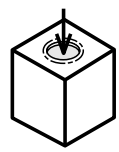
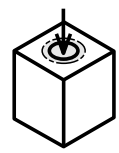
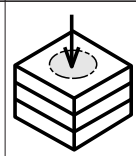


Toolholder Dimensions

Description	Std.	Number of Flutes	Dimension (mm) øD	L1	L2	L3	ød	ød1	Radial Direction Offset Applicable Range (mm)	Spare Parts Clamp Screw	Wrench	Wrench	Applicable Insert ➡ K39
S20 -DRS10035	●	1	10.0	92	49	35.0	20	26	+0.2	SB-2080TR	FT-6	-	DS100
-DRS10336	●	1	10.3	92	49	36.0			+0.1				
-DRS10537	●	1	10.5	93	50	37.0			+0.2				DS105
-DRS11038	●	1	11.0	96	53	38.5			+0.2	SB-2290TR			DS110
-DRS11540	●	1	11.5	97	54	40.5			+0.2				DS115
-DRS12042	●	1	12.0	99	56	42.0			+0.4	SB-25100TR	-	DT-7	DS120
-DRS12544	●	1	12.5	101	58	44.0			+0.2				

Cutting Conditions by Application

(Workpiece: C50)

Applications		Flat Surface	Slanted Surface	Half Cylindrical	Hole Expansion	Concave Surface	Pre-drilled Surface	Stacked Plates
Workpiece Shape								
DRS	Cutting speed (m/min)	80	80	Not recommended	Not recommended	80	Not recommended	Not Available
DRS	Feed Rate (mm/rev)	0.08	0.04	Not recommended	Not recommended	Concave part 0.04 Continuous part 0.08	Not recommended	Not Available
Coolant (Internal)		Yes	Yes	–	–	Yes	–	Not Available

· When machining with outer coolant, Max. depth should be 1.5 times (1.5XD) of the cutting diameter (øD) because chip evacuation performance drops.

DRS Recommended Cutting Conditions (Coolant)

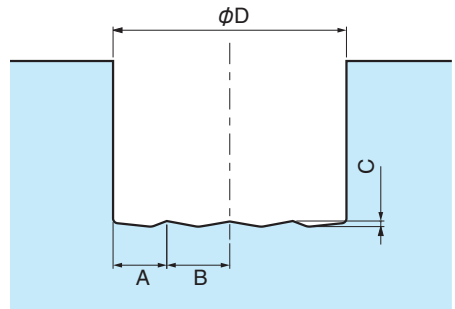
Workpiece Material	Recommended Grade (Vc m/min) MEGACOAT PR1230	MEGACOAT PR1210	PVD Coated Carbide PR660	PVD Coated Carbide PP905	Feed Rate (mm/rev)
Low Carbon Steel	★ 80~100	-	☆ 80~100	-	0.06
Carbon Steel	★ 80~100	-	☆ 80~100	-	0.08~0.1
Alloy Steel	★ 80	-	☆ 80	-	0.04~0.06
Mold Steel	★ 80	-	☆ 80	-	0.04~0.06
Stainless Steel (Austenitic related)	★ 70~80	-	☆ 70~80	-	0.05~0.06
Gray Cast Iron	-	★ 80 ~ 100	-	☆ 80~100	0.08~0.1

★ : 1st Recommendation ☆ : 2nd Recommendation

1. Apply a sufficent amount of coolant.
2. If cutting speed is decreased too much from above condition, chip evacuation performance will deteriorate.
   If the feed rate is increased too much from above condition, inner edge chip evacuation will deteriorate.
   If the feed rate is decreased too much from above condition, outer edge chip evacuation will deteriorate.
3. If chips are too long when low carbon steel cutting, increased the cutting speed to 120~150m/min.
   If this does not solve the problem, try peck feeding.
   [How to peck feed] ① Cut 1~2mm ② Return 0.1mm ③ Repeat ① and ②

DRS Hole Bottom Shape (mm)

øD	A	B	C
10.0	2.2	2.80	0.2
10.3	2.3	2.85	0.2
10.5	2.3	2.95	0.2
11.0	2.4	3.10	0.2
11.5	2.5	3.25	0.2
12.0	2.8	3.20	0.3
12.5	2.9	3.35	0.4



● : Std. Item □ : Check Availability