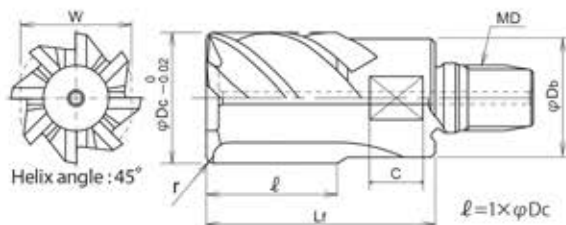


S-Head

SMSATYPE

Through Coolant Hole



BODY

Cat. No.	Stock	Grade	No. of flutes	Dimensions (mm)							
				r	φDc	ℓ	Lf	φDb	MD	C	W
SMSA-8160R05-M8	<input type="checkbox"/>	J C 8 0 1 5	8	0.5	16	16	30	15	M8	8	14
SMSA-8160R10-M8	<input type="checkbox"/>			1							
SMSA-6160R20-M8	<input type="checkbox"/>		6	2	20	20	35	19	M10	9	17
SMSA-6160R30-M8	<input type="checkbox"/>			3							
SMSA-8200R05-M10	<input type="checkbox"/>		8	0.5	25	25	43	24	M12	11	22
SMSA-8200R10-M10	<input type="checkbox"/>			1							
SMSA-8200R20-M10	<input type="checkbox"/>		6	2	30	30	56	29	M16	14	27
SMSA-6200R30-M10	<input type="checkbox"/>			3							
SMSA-8250R10-M12	<input type="checkbox"/>		8	1	32	32	56	30			
SMSA-8250R20-M12	<input type="checkbox"/>			2							
SMSA-6250R30-M12	<input type="checkbox"/>		6	3							
SMSA-8300R10-M16	<input type="checkbox"/>		8	1	30	30	56	29			
SMSA-8300R20-M16	<input type="checkbox"/>			2							
SMSA-6300R30-M16	<input type="checkbox"/>		6	3							
SMSA-8320R10-M16	<input type="checkbox"/>		8	1	32	32	56	30			
SMSA-8320R20-M16	<input type="checkbox"/>			2							
SMSA-6320R30-M16	<input type="checkbox"/>	6	3								

Note) Please refer page B180-B183 for recommended cutting conditions.

Arbor

B193

Instructions for mounting S-Head on MSN carbide shank holder

Please refer the following table for tightening torque to mount S-Head on MSN carbide shank.

Recommended tightening torque for S-Head



Tool dia. φDc(mm)	Spanner size W (mm)	Spanner wrench	Tightening torque
φ 16	14	DS-14	10 ~ 11N·m
φ 20	17	DS-17	10 ~ 16N·m
φ 25	22	DS-22	15 ~ 20N·m
φ 30	27	DS-27	20 ~ 25N·m
φ 32	27	DS-27	20 ~ 25N·m

※ S-Head are supplied without spanner wrench.

※ Please refer page B009 for details.

S-Head

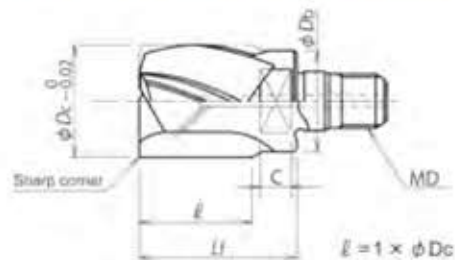
SMAL TYPE


■ Solid modular head "S-Head for aluminum alloy" SMAL type

- For aluminum alloy
- 3 flutes / Helix angle 45°
- Flute length 1D



Helix angle: 45°



Cat. No.	Stock	Grade	No. of inserts	Dimensions (mm)						
				ϕD_c	ℓ	L_f	ϕD_b	MD	C	W
SMAL-3180-M8	●	FZ15	3	18	18	26	15	M8	5.5	14
SMAL-3200-M10	●		3	20	20	28	18	M10	5.5	14
SMAL-3220-M10	●		3	22	22	31	19	M10	6.5	17
SMAL-3250-M12	●		3	25	25	35	23	M12	5.5	19
SMAL-3280-M12	●		3	28	28	38	24	M12	5.5	22

- Note) 1. When mounting head to shank, tighten with recommended tightening torque value not to be over-tightening. (See the right table "Attention to mounting S-Head SMAL type".)
 2. Only use torque control spanner wrench or DIJET DS type spanner wrench.
 3. Spindle speed shall not exceed recommended cutting conditions.

Arbor B193

Attention to mounting "S-Head for aluminum alloy" SMAL type

When mounting head to shank, tighten with recommended tightening torque value not to be over-tightening.



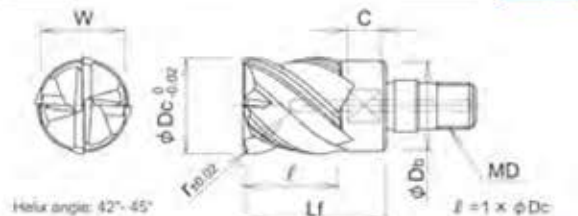
Tool dia ϕD_c (mm)	Thread	Spanner size of SMAL W (mm)	Cat. No. of spanner wrench	Recommended tightening torque
18	M8	14	DS-14	10 ~ 11N·m
20	M10	14	DS-14	10 ~ 16N·m
22	M10	17	DS-17	10 ~ 16N·m
25	M12	19	DS-19	15 ~ 20N·m
28	M12	22	DS-22	15 ~ 20N·m

S-Head

SMSR_{TYPE}
Solid modular head „Anti-vibration S-Head“ SMSR type

Through Coolant Hole

- 4 flutes / Helix angle 42°– 45°
- Flute length 1D



Cat. No.	Stock	Grade	No. of inserts	Dimensions (mm)								
				r	φDc	ℓ	Lf	φDb	MD	C	W	
SMSR-4160R05-M8	●			0.5								
SMSR-4160R10-M8	●			1	16	16	24	15	M8	5.5	14	
SMSR-4160R20-M8	●			2								
SMSR-4160R30-M8	●			3								
SMSR-4200R05-M10	●			0.5								
SMSR-4200R10-M10	●			1	20	20	29	19	M10	5.5	17	
SMSR-4200R20-M10	●			2								
SMSR-4200R30-M10	●	DH115	4	3								
SMSR-4250R10-M12	●			1								
SMSR-4250R20-M12	●			2	25	25	35	24	M12	5.5	22	
SMSR-4250R30-M12	●			3								
SMSR-4300R10-M16	□			1								
SMSR-4300R20-M16	□			2	30	30	44	29	M16	5.5	27	
SMSR-4300R30-M16	□			3								
SMSR-4320R10-M16	●			1	32	32	46	30	M16	5.5	27	
SMSR-4320R20-M16	●			2								
SMSR-4320R30-M16	●			3								

Note) 1. When mounting head to shank, tighten with recommended tightening torque value not to be over-tightening. (See the right table *Attention to mounting S-Head.)
 2. Only use torque control spanner wrench or DIJET DS type spanner wrench.

Arbor B193

Attention to mounting S-Head – Recommended tightening torque for S-Head

Please tighten the tightening torque by the power of about usual 1/5 to become uniting carbide head & shank.



Tool dia φDc (mm)	Spanner size	Spanner wrench	Tightening torque
φ 16	14	DS-14	10 ~ 11N·m
φ 20	17	DS-17	10 ~ 16N·m
φ 25	22	DS-22	15 ~ 20N·m
φ 30	27	DS-27	20 ~ 25N·m
φ 32	27	DS-27	20 ~ 25N·m

※ S-Head are supplied without spanner wrench.