

## *DR Carbide Reaming Tools*

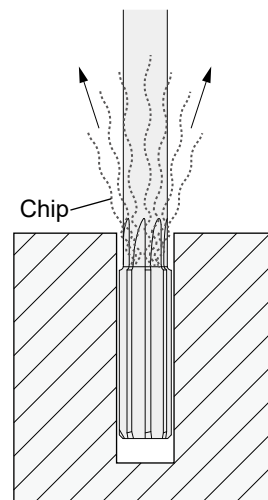
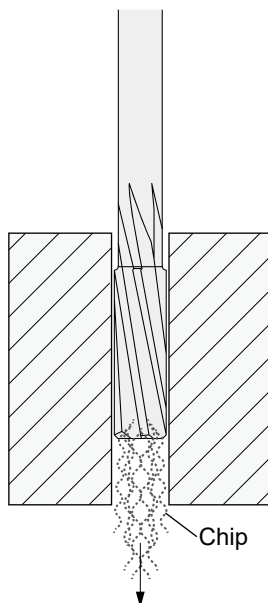
- Solid carbide reamers and modular reamers are suitable for a various applications.
- DRM left spiral flute reamer for through hole.
- DRS straight flute reamer for blind or through hole.



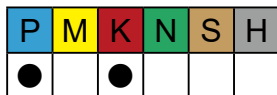
Appearance	Name	Code No.	Diameter	Coolant	Application	Page
	Solid Carbide Reamer · Left spiral flute	DRMN	Ø2.99~Ø12.02	External	For through hole	02
	Solid Carbide Reamer · Straight flute	DRSC	Ø3~Ø12	Internal	For blind hole / through hole	03
	Solid Carbide Reamer · Straight flute	DRSN	Ø2.99~Ø20	External		04
	Modular Reamer Head · Left spiral flute	DRMWC	Ø12.99~Ø20.01	Internal	For through hole	05
	Modular Reamer Head · Left spiral flute	DRMWN	Ø12.99~Ø20.01	External		06
	Modular Reamer Head · Straight flute	DRSWC	Ø12.99~Ø20.01	Internal	For blind hole / through hole	07
	Modular Reamer Head · Straight flute	DRSWN	Ø12.99~Ø20.01	External		08

Chip escape from through hole

Chip escape from blind hole

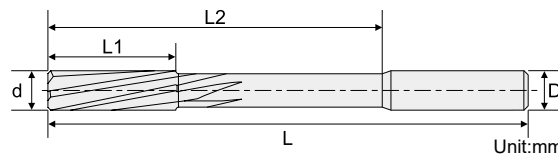


**DRMN Solid Carbide Reamer**



- External coolant
- d tolerance : H7
- For through hole

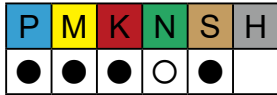
- Left spiral flute
- Right hand cutting
- UNIX coating
- D tolerance : h6
- Hole tolerance : H7



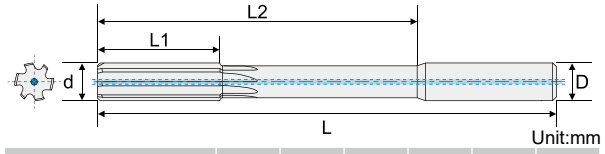
Order No.	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (z)
DRMN0299090UX	2.99	15	35	60	4	4
DRMN0300090UX	3.00	15	35	60	4	4
DRMN0301090UX	3.01	15	35	60	4	4
DRMN0302090UX	3.02	15	35	60	4	4
DRMN0310090UX	3.10	15	35	60	4	4
DRMN0320090UX	3.20	15	35	60	4	4
DRMN0330090UX	3.30	15	35	60	4	4
DRMN0340090UX	3.40	15	35	60	4	4
DRMN0350090UX	3.50	18	35	60	4	4
DRMN0360090UX	3.60	18	35	60	4	4
DRMN0370090UX	3.70	18	35	60	4	4
DRMN0380090UX	3.80	18	35	60	4	4
DRMN0390090UX	3.90	18	35	60	4	4
DRMN0399090UX	3.99	19	50	75	4	4
DRMN0400090UX	4.00	19	50	75	4	4
DRMN0401090UX	4.01	19	50	75	4	4
DRMN0402090UX	4.02	19	50	75	4	4
DRMN0410090UX	4.10	19	50	75	6	4
DRMN0420090UX	4.20	19	50	75	6	4
DRMN0430090UX	4.30	19	50	75	6	4
DRMN0440090UX	4.40	19	50	75	6	4
DRMN0450090UX	4.50	21	50	75	6	4
DRMN0460090UX	4.60	21	50	75	6	4
DRMN0470090UX	4.70	21	50	75	6	4
DRMN0480090UX	4.80	21	50	75	6	4
DRMN0490090UX	4.90	21	50	75	6	4
DRMN0499090UX	4.99	23	50	75	6	6
DRMN0500090UX	5.00	23	50	75	6	6
DRMN0501090UX	5.01	23	50	75	6	6
DRMN0502090UX	5.02	23	50	75	6	6
DRMN0510090UX	5.10	23	50	75	6	6
DRMN0520090UX	5.20	23	50	75	6	6
DRMN0530090UX	5.30	23	50	75	6	6
DRMN0540090UX	5.40	23	50	75	6	6
DRMN0550090UX	5.50	26	50	75	6	6
DRMN0560090UX	5.60	26	50	75	6	6
DRMN0570090UX	5.70	26	50	75	6	6
DRMN0580090UX	5.80	26	50	75	6	6
DRMN0590090UX	5.90	26	50	75	6	6
DRMN0599090UX	5.99	26	65	100	6	6
DRMN0600090UX	6.00	26	65	100	6	6
DRMN0601090UX	6.01	26	65	100	6	6
DRMN0602090UX	6.02	26	65	100	6	6
DRMN0650090UX	6.50	28	65	100	8	6
DRMN0699090UX	6.99	31	70	109	8	6
DRMN0700090UX	7.00	31	70	109	8	6
DRMN0701090UX	7.01	31	70	109	8	6
DRMN0702090UX	7.02	31	70	109	8	6

Order No.	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (z)
DRMN0750090UX	7.50	31	70	109	8	6
DRMN0799090UX	7.99	33	80	109	8	6
DRMN0800090UX	8.00	33	80	109	8	6
DRMN0801090UX	8.01	33	80	109	8	6
DRMN0802090UX	8.02	33	80	109	8	6
DRMN0850090UX	8.50	33	80	125	10	6
DRMN0899090UX	8.99	36	85	125	10	6
DRMN0900090UX	9.00	36	85	125	10	6
DRMN0901090UX	9.01	36	85	125	10	6
DRMN0902090UX	9.02	36	85	125	10	6
DRMN0950090UX	9.50	36	85	125	10	6
DRMN0999090UX	9.99	38	85	125	10	6
DRMN1000090UX	10.00	38	85	125	10	6
DRMN1001090UX	10.01	38	85	125	10	6
DRMN1002090UX	10.02	38	85	125	10	6
DRMN1050090UX	10.50	38	85	125	12	6
DRMN1099090UX	10.99	41	100	150	12	6
DRMN1100090UX	11.00	41	100	150	12	6
DRMN1101090UX	11.01	41	100	150	12	6
DRMN1102090UX	11.02	41	100	150	12	6
DRMN1150090UX	11.50	41	100	150	12	6
DRMN1199090UX	11.99	44	100	150	12	6
DRMN1200090UX	12.00	44	100	150	12	6
DRMN1201090UX	12.01	44	100	150	12	6
DRMN1202090UX	12.02	44	100	150	12	6

**DRSC Solid Carbide Reamer**



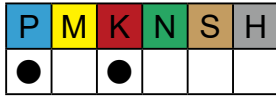
- Internal coolant
- Straight flute
- Right hand cutting
- UNIX coating
- d tolerance : H7
- D tolerance : h6
- Unequal flute spacing
- For blind hole / through hole
- Hole tolerance : H7



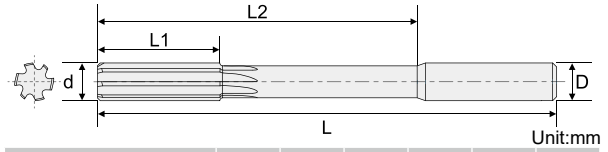
Order No.	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (z)
DRSC0300090UX	3.00	15	35	60	4	4
DRSC0310090UX	3.10	15	35	60	4	4
DRSC0320090UX	3.20	15	35	60	4	4
DRSC0330090UX	3.30	15	35	60	4	4
DRSC0340090UX	3.40	15	35	60	4	4
DRSC0350090UX	3.50	18	35	60	4	4
DRSC0360090UX	3.60	18	35	60	4	4
DRSC0370090UX	3.70	18	35	60	4	4
DRSC0380090UX	3.80	18	35	60	4	4
DRSC0390090UX	3.90	18	35	60	4	4
DRSC0400090UX	4.00	19	50	75	4	4
DRSC0410090UX	4.10	19	50	75	6	4
DRSC0420090UX	4.20	19	50	75	6	4
DRSC0430090UX	4.30	19	50	75	6	4
DRSC0440090UX	4.40	19	50	75	6	4
DRSC0450090UX	4.50	21	50	75	6	4
DRSC0460090UX	4.60	21	50	75	6	4
DRSC0470090UX	4.70	21	50	75	6	4
DRSC0480090UX	4.80	21	50	75	6	4
DRSC0490090UX	4.90	21	50	75	6	4
DRSC0500090UX	5.00	23	50	75	6	6
DRSC0510090UX	5.10	23	50	75	6	6
DRSC0520090UX	5.20	23	50	75	6	6
DRSC0530090UX	5.30	23	50	75	6	6
DRSC0540090UX	5.40	23	50	75	6	6
DRSC0550090UX	5.50	26	50	75	6	6
DRSC0560090UX	5.60	26	50	75	6	6
DRSC0570090UX	5.70	26	50	75	6	6
DRSC0580090UX	5.80	26	50	75	6	6
DRSC0590090UX	5.90	26	50	75	6	6
DRSC0600090UX	6.00	26	65	100	6	6
DRSC0650090UX	6.50	28	65	100	8	6
DRSC0700090UX	7.00	31	70	109	8	6
DRSC0750090UX	7.50	31	70	109	8	6
DRSC0800090UX	8.00	33	80	109	8	6
DRSC0850090UX	8.50	33	80	125	10	6
DRSC0900090UX	9.00	36	85	125	10	6
DRSC0950090UX	9.50	36	85	125	10	6
DRSC1000090UX	10.00	38	85	125	10	6
DRSC1050090UX	10.50	38	85	125	12	6
DRSC1100090UX	11.00	41	100	150	12	6
DRSC1150090UX	11.50	41	100	150	12	6
DRSC1200090UX	12.00	44	100	150	12	6

Order No.	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (z)

**DRSN Solid Carbide Reamer**



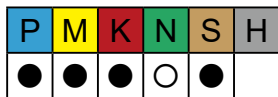
- External coolant
- Straight flute
- Right hand cutting
- UNIX coating
- d tolerance : H7
- D tolerance : h6
- For blind hole / through hole
- Hole tolerance : H7



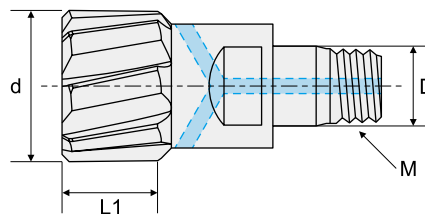
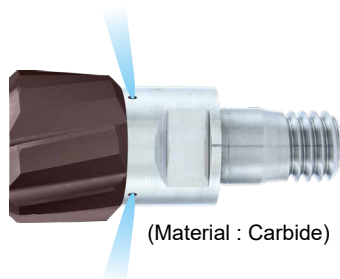
Order No.	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (z)
DRSN0299090UX	2.99	15	35	60	4	4
DRSN0300090UX	3.00	15	35	60	4	4
DRSN0301090UX	3.01	15	35	60	4	4
DRSN0302090UX	3.02	15	35	60	4	4
DRSN0310090UX	3.10	15	35	60	4	4
DRSN0320090UX	3.20	15	35	60	4	4
DRSN0330090UX	3.30	15	35	60	4	4
DRSN0340090UX	3.40	15	35	60	4	4
DRSN0350090UX	3.50	18	35	60	4	4
DRSN0360090UX	3.60	18	35	60	4	4
DRSN0370090UX	3.70	18	35	60	4	4
DRSN0380090UX	3.80	18	35	60	4	4
DRSN0390090UX	3.90	18	35	60	4	4
DRSN0399090UX	3.99	19	50	75	4	4
DRSN0400090UX	4.00	19	50	75	4	4
DRSN0401090UX	4.01	19	50	75	4	4
DRSN0402090UX	4.02	19	50	75	4	4
DRSN0410090UX	4.10	19	50	75	6	4
DRSN0420090UX	4.20	19	50	75	6	4
DRSN0430090UX	4.30	19	50	75	6	4
DRSN0440090UX	4.40	19	50	75	6	4
DRSN0450090UX	4.50	21	50	75	6	4
DRSN0460090UX	4.60	21	50	75	6	4
DRSN0470090UX	4.70	21	50	75	6	4
DRSN0480090UX	4.80	21	50	75	6	4
DRSN0490090UX	4.90	21	50	75	6	4
DRSN0499090UX	4.99	23	50	75	6	6
DRSN0500090UX	5.00	23	50	75	6	6
DRSN0501090UX	5.01	23	50	75	6	6
DRSN0502090UX	5.02	23	50	75	6	6
DRSN0510090UX	5.10	23	50	75	6	6
DRSN0520090UX	5.20	23	50	75	6	6
DRSN0530090UX	5.30	23	50	75	6	6
DRSN0540090UX	5.40	23	50	75	6	6
DRSN0550090UX	5.50	26	50	75	6	6
DRSN0560090UX	5.60	26	50	75	6	6
DRSN0570090UX	5.70	26	50	75	6	6
DRSN0580090UX	5.80	26	50	75	6	6
DRSN0590090UX	5.90	26	50	75	6	6
DRSN0599090UX	5.99	26	65	100	6	6
DRSN0600090UX	6.00	26	65	100	6	6
DRSN0601090UX	6.01	26	65	100	6	6
DRSN0602090UX	6.02	26	65	100	6	6
DRSN0650090UX	6.50	28	65	100	8	6
DRSN0699090UX	6.99	31	70	109	8	6
DRSN0700090UX	7.00	31	70	109	8	6
DRSN0701090UX	7.01	31	70	109	8	6
DRSN0702090UX	7.02	31	70	109	8	6

Order No.	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (z)
DRSN0750090UX	7.50	31	70	109	8	6
DRSN0799090UX	7.99	33	80	109	8	6
DRSN0800090UX	8.00	33	80	109	8	6
DRSN0801090UX	8.01	33	80	109	8	6
DRSN0802090UX	8.02	33	80	109	8	6
DRSN0850090UX	8.50	33	80	125	10	6
DRSN0899090UX	8.99	36	85	125	10	6
DRSN0900090UX	9.00	36	85	125	10	6
DRSN0901090UX	9.01	36	85	125	10	6
DRSN0902090UX	9.02	36	85	125	10	6
DRSN0950090UX	9.50	36	85	125	10	6
DRSN0999090UX	9.99	38	85	125	10	6
DRSN1000090UX	10.00	38	85	125	10	6
DRSN1001090UX	10.01	38	85	125	10	6
DRSN1002090UX	10.02	38	85	125	10	6
DRSN1050090UX	10.50	38	85	125	12	6
DRSN1099090UX	10.99	41	100	150	12	6
DRSN1100090UX	11.00	41	100	150	12	6
DRSN1101090UX	11.01	41	100	150	12	6
DRSN1102090UX	11.02	41	100	150	12	6
DRSN1150090UX	11.50	41	100	150	12	6
DRSN1199090UX	11.99	44	100	150	12	6
DRSN1200090UX	12.00	44	100	150	12	6
DRSN1201090UX	12.01	44	100	150	12	6
DRSN1202090UX	12.02	44	100	150	12	6
DRSN1300090UX	13.00	44	100	150	14	6
DRSN1400090UX	14.00	44	100	150	14	6
DRSN1600090UX	16.00	44	100	150	16	6
DRSN1800090UX	18.00	44	100	150	18	6
DRSN2000090UX	20.00	44	100	150	20	8

**DRMWC Modular Reamer Head**



- Internal coolant
- Left spiral flute
- Right hand cutting
- UNIX coating
- d tolerance : H7
- Hole tolerance : H8
- For through hole



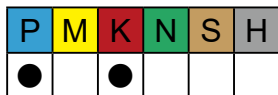
Unit:mm

Order No.	Dia. (d)	CL (L1)	ND (D)	M (M)	Flutes (Z)	Applicable Adapter Dia. (d2)
DRMWC812990UX	12.99	8	6.5	M6	8	10
DRMWC813000UX	13	8	6.5	M6	8	10
DRMWC813010UX	13.01	8	6.5	M6	8	10
DRMWC813990UX	13.99	8	6.5	M6	8	11 ~ 11.5
DRMWC814000UX	14	8	6.5	M6	8	11 ~ 11.5
DRMWC814010UX	14.01	8	6.5	M6	8	11 ~ 11.5
DRMWC814990UX	14.99	10	8.5	M8	8	12 ~ 12.5
DRMWC815000UX	15	10	8.5	M8	8	12 ~ 12.5
DRMWC815010UX	15.01	10	8.5	M8	8	12 ~ 12.5
DRMWC815870UX	15.875	10	8.5	M8	8	12 ~ 12.5
DRMWC815990UX	15.99	10	8.5	M8	8	12.5 ~ 13
DRMWC816000UX	16	10	8.5	M8	8	12.5 ~ 13
DRMWC816010UX	16.01	10	8.5	M8	8	12.5 ~ 13
DRMWC816990UX	16.99	10	8.5	M8	8	14
DRMWC817000UX	17	10	8.5	M8	8	14
DRMWC817010UX	17.01	10	8.5	M8	8	14
DRMWC817990UX	17.99	10	8.5	M8	8	15
DRMWC818000UX	18	10	8.5	M8	8	15
DRMWC818010UX	18.01	10	8.5	M8	8	15
DRMWC818990UX	18.99	10	8.5	M8	8	16
DRMWC819000UX	19	10	8.5	M8	8	16
DRMWC819010UX	19.01	10	8.5	M8	8	16
DRMWC819050UX	19.05	10	8.5	M8	8	16
DRMWC819990UX	19.99	12	10.5	M10	8	17
DRMWC820000UX	20	12	10.5	M10	8	17
DRMWC820010UX	20.01	12	10.5	M10	8	17

Unit:mm

Head diameter	Head diameter tolerance (H7)	Hole diameter tolerance (H8)
13 ~ 18	+0.018 / 0	+0.027 / 0
18.01 ~ 20.01	+0.021 / 0	+0.033 / 0

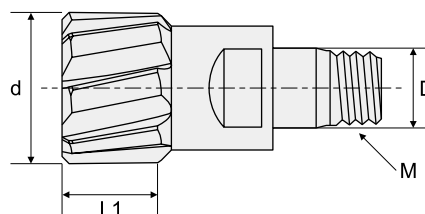
**DRMWN Modular Reamer Head**



- External coolant
- Left spiral flute
- Right hand cutting
- UNIX coating
- d tolerance : H7
- For through hole
- Hole tolerance : H8



(Material : Carbide)



Unit:mm

Order No.	Dia. (d)	CL (L1)	ND (D)	M (M)	Flutes (Z)	Applicable Adapter Dia. (d2)
DRMWN812990UX	12.99	8	6.5	M6	8	10
DRMWN813000UX	13	8	6.5	M6	8	10
DRMWN813010UX	13.01	8	6.5	M6	8	10
DRMWN813990UX	13.99	8	6.5	M6	8	11 ~ 11.5
DRMWN814000UX	14	8	6.5	M6	8	11 ~ 11.5
DRMWN814010UX	14.01	8	6.5	M6	8	11 ~ 11.5
DRMWN814990UX	14.99	10	8.5	M8	8	12 ~ 12.5
DRMWN815000UX	15	10	8.5	M8	8	12 ~ 12.5
DRMWN815010UX	15.01	10	8.5	M8	8	12 ~ 12.5
DRMWN815870UX	15.875	10	8.5	M8	8	12 ~ 12.5
DRMWN815990UX	15.99	10	8.5	M8	8	12.5 ~ 13
DRMWN816000UX	16	10	8.5	M8	8	12.5 ~ 13
DRMWN816010UX	16.01	10	8.5	M8	8	12.5 ~ 13
DRMWN816990UX	16.99	10	8.5	M8	8	14
DRMWN817000UX	17	10	8.5	M8	8	14
DRMWN817010UX	17.01	10	8.5	M8	8	14
DRMWN817990UX	17.99	10	8.5	M8	8	15
DRMWN818000UX	18	10	8.5	M8	8	15
DRMWN818010UX	18.01	10	8.5	M8	8	15
DRMWN818990UX	18.99	10	8.5	M8	8	16
DRMWN819000UX	19	10	8.5	M8	8	16
DRMWN819010UX	19.01	10	8.5	M8	8	16
DRMWN819050UX	19.05	10	8.5	M8	8	16
DRMWN819990UX	19.99	12	10.5	M10	8	17
DRMWN820000UX	20	12	10.5	M10	8	17
DRMWN820010UX	20.01	12	10.5	M10	8	17

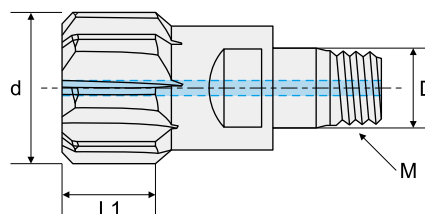
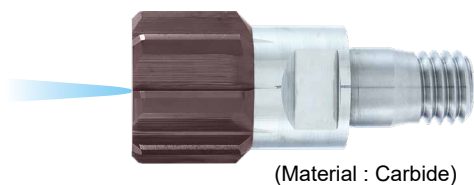
Unit:mm

Head diameter	Head diameter tolerance (H7)	Hole diameter tolerance (H8)
13 ~ 18	+0.018 / 0	+0.027 / 0
18.01 ~ 20.01	+0.021 / 0	+0.033 / 0

**DRSWC Modular Reamer Head**



- Internal coolant
- Straight flute
- Right hand cutting
- UNIX coating
- d tolerance : H7
- Unequal flute spacing
- For blind hole / through hole
- Hole tolerance : H8



Unit:mm

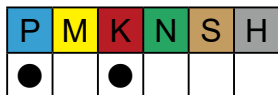
Order No.	Dia. (d)	CL (L1)	ND (D)	M (M)	Flutes (Z)	Applicable Adapter Dia. (d2)
DRSWC812990UX	12.99	8	6.5	M6	8	10
DRSWC813000UX	13	8	6.5	M6	8	10
DRSWC813010UX	13.01	8	6.5	M6	8	10
DRSWC813990UX	13.99	8	6.5	M6	8	11 ~ 11.5
DRSWC814000UX	14	8	6.5	M6	8	11 ~ 11.5
DRSWC814010UX	14.01	8	6.5	M6	8	11 ~ 11.5
DRSWC814990UX	14.99	10	8.5	M8	8	12 ~ 12.5
DRSWC815000UX	15	10	8.5	M8	8	12 ~ 12.5
DRSWC815010UX	15.01	10	8.5	M8	8	12 ~ 12.5
DRSWC815870UX	15.875	10	8.5	M8	8	12 ~ 12.5
DRSWC815990UX	15.99	10	8.5	M8	8	12.5 ~ 13
DRSWC816000UX	16	10	8.5	M8	8	12.5 ~ 13
DRSWC816010UX	16.01	10	8.5	M8	8	12.5 ~ 13
DRSWC816990UX	16.99	10	8.5	M8	8	14
DRSWC817000UX	17	10	8.5	M8	8	14
DRSWC817010UX	17.01	10	8.5	M8	8	14
DRSWC817990UX	17.99	10	8.5	M8	8	15
DRSWC818000UX	18	10	8.5	M8	8	15
DRSWC818010UX	18.01	10	8.5	M8	8	15
DRSWC818990UX	18.99	10	8.5	M8	8	16
DRSWC819000UX	19	10	8.5	M8	8	16
DRSWC819010UX	19.01	10	8.5	M8	8	16
DRSWC819050UX	19.05	10	8.5	M8	8	16
DRSWC819990UX	19.99	12	10.5	M10	8	17
DRSWC820000UX	20	12	10.5	M10	8	17
DRSWC820010UX	20.01	12	10.5	M10	8	17

Unit:mm

Head diameter	Head diameter tolerance (H7)	Hole diameter tolerance (H8)
13 ~ 18	+0.018 / 0	+0.027 / 0
18.01 ~ 20.01	+0.021 / 0	+0.033 / 0



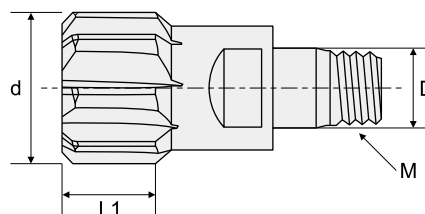
**DRSWN Modular Reamer Head**



- External coolant
- Straight flute
- Right hand cutting
- UNIX coating
- d tolerance : H7
- For blind hole / through hole
- Hole tolerance : H8



(Material : Carbide)



Unit:mm

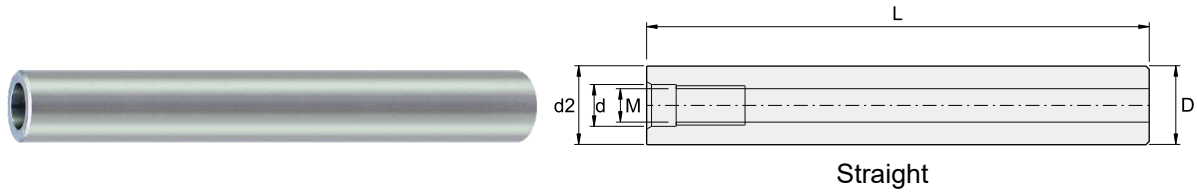
Order No.	Dia. (d)	CL (L1)	ND (D)	M (M)	Flutes (Z)	Applicable Adapter Dia. (d2)
DRSWN812990UX	12.99	8	6.5	M6	8	10
DRSWN813000UX	13	8	6.5	M6	8	10
DRSWN813010UX	13.01	8	6.5	M6	8	10
DRSWN813990UX	13.99	8	6.5	M6	8	11 ~ 11.5
DRSWN814000UX	14	8	6.5	M6	8	11 ~ 11.5
DRSWN814010UX	14.01	8	6.5	M6	8	11 ~ 11.5
DRSWN814990UX	14.99	10	8.5	M8	8	12 ~ 12.5
DRSWN815000UX	15	10	8.5	M8	8	12 ~ 12.5
DRSWN815010UX	15.01	10	8.5	M8	8	12 ~ 12.5
DRSWN815870UX	15.875	10	8.5	M8	8	12 ~ 12.5
DRSWN815990UX	15.99	10	8.5	M8	8	12.5 ~ 13
DRSWN816000UX	16	10	8.5	M8	8	12.5 ~ 13
DRSWN816010UX	16.01	10	8.5	M8	8	12.5 ~ 13
DRSWN816990UX	16.99	10	8.5	M8	8	14
DRSWN817000UX	17	10	8.5	M8	8	14
DRSWN817010UX	17.01	10	8.5	M8	8	14
DRSWN817990UX	17.99	10	8.5	M8	8	15
DRSWN818000UX	18	10	8.5	M8	8	15
DRSWN818010UX	18.01	10	8.5	M8	8	15
DRSWN818990UX	18.99	10	8.5	M8	8	16
DRSWN819000UX	19	10	8.5	M8	8	16
DRSWN819010UX	19.01	10	8.5	M8	8	16
DRSWN819050UX	19.05	10	8.5	M8	8	16
DRSWN819990UX	19.99	12	10.5	M10	8	17
DRSWN820000UX	20	12	10.5	M10	8	17
DRSWN820010UX	20.01	12	10.5	M10	8	17

Unit:mm

Head diameter	Head diameter tolerance (H7)	Hole diameter tolerance (H8)
13 ~ 18	+0.018 / 0	+0.027 / 0
18.01 ~ 20.01	+0.021 / 0	+0.033 / 0

**Carbide Adapter - ISO M Threads**

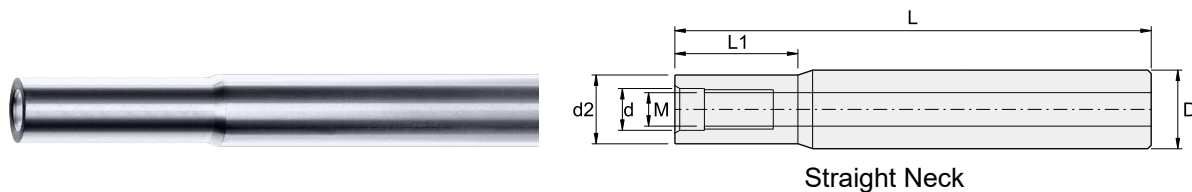
**SWMEA - Carbide Adapter (Straight)**



Order No.	Dimensions (mm)				
	d2	d	L	D	M
ISWMEA10100060	10	6.5	100	10	M6
ISWMEA10150060	10	6.5	150	10	M6
ISWMEA11100060	11	6.5	100	11	M6
ISWMEA11150060	11	6.5	150	11	M6
ISWMEA12075060	12	6.5	75	12	M6
ISWMEA12100060	12	6.5	100	12	M6
ISWMEA12150060	12	6.5	150	12	M6
ISWMEA12200060	12	6.5	200	12	M6
ISWMEA14100080	14	8.5	100	14	M8
ISWMEA14150080	14	8.5	150	14	M8
ISWMEA14200080	14	8.5	200	14	M8
ISWMEA15100080	15	8.5	100	15	M8
ISWMEA15150080	15	8.5	150	15	M8
ISWMEA15200080	15	8.5	200	15	M8
ISWMEA16100080	16	8.5	100	16	M8
ISWMEA16150080	16	8.5	150	16	M8
ISWMEA16200080	16	8.5	200	16	M8
ISWMEA16250080	16	8.5	250	16	M8

**Carbide Adapter - ISO M Threads**

**SWMEB - Carbide Adapter (Straight Neck)**



Order No.	Dimensions (mm)					
	d2	d	L1	L	D	M
ISWMEB12100060	11.5	6.5	24	100	12	M6
ISWMEB12100061	11.5	6.5	40	100	12	M6
ISWMEB12100062	11.5	6.5	60	100	12	M6
ISWMEB12150060	11.5	6.5	24	150	12	M6
ISWMEB12150061	11.5	6.5	100	150	12	M6
ISWMEB14100080	13.0	8.5	30	100	14	M8
ISWMEB14150080	13.0	8.5	60	150	14	M8
ISWMEB14200080	13.0	8.5	100	200	14	M8
ISWMEB16150082	13.0	8.5	32	150	16	M8
ISWMEB16150083	14.0	8.5	80	150	16	M8
ISWMEB16150080	15.0	8.5	30	150	16	M8
ISWMEB16150081	15.0	8.5	100	150	16	M8
ISWMEB16200080	15.0	8.5	40	200	16	M8
ISWMEB16200081	15.0	8.5	120	200	16	M8
ISWMEB20150102	17.0	10.5	40	150	20	M10
ISWMEB20150103	17.0	10.5	120	200	20	M10

**Recommended Cutting Conditions**

**DRMN, DRSN Series (External Coolant)**

Work Material		Drill Diameter	Ø3-6mm		Ø6.1~10mm		Ø10.1-12mm	
		Hardness	Vc (m/min)	Feed (mm/rev)	Vc (m/min)	Feed (mm/rev)	Vc (m/min)	Feed (mm/rev)
P	Mild Steel	(<180HB)	10~20	0.03~0.12	10~20	0.06~0.2	10~20	0.1~0.22
	Carbon Steel	(180~280HB)	10~16	0.03~0.12	10~16	0.06~0.2	10~16	0.1~0.22
	Alloy Steel	(280~350HB)	8~12	0.03~0.12	8~12	0.06~0.2	8~12	0.1~0.22
M	Stainless Steel	-	-	-	-	-	-	-
K	Cast Iron	(<350Mpa)	8~16	0.03~0.12	8~16	0.06~0.02	8~16	0.1~0.22
	Ductile Cast Iron	(<450Mpa)	8~16	0.03~0.12	8~16	0.06~0.02	8~16	0.1~0.22
N	Aluminum <12% Si	-	20~30	0.03~0.13	20~30	0.07~0.23	20~30	0.1~0.28
	Aluminum >12% Si	-	20~30	0.03~0.13	20~30	0.07~0.23	20~30	0.1~0.28
S	Heat Resistant Alloy	-	-	-	-	-	-	-
H	Hardened Material	-	-	-	-	-	-	-

**DRSC Series (Internal Coolant)**

Work Material		Drill Diameter	Ø3-6mm		Ø6.1~10mm		Ø10.1-12mm	
		Hardness	Vc (m/min)	Feed (mm/rev)	Vc (m/min)	Feed (mm/rev)	Vc (m/min)	Feed (mm/rev)
P	Mild Steel	(<180HB)	40~70	0.1~0.2	40~70	0.1~0.24	40~70	0.1~0.3
	Carbon Steel	(180~280HB)	25~50	0.1~0.2	25~50	0.1~0.24	25~50	0.1~0.3
	Alloy Steel	(280~350HB)	15~25	0.08~0.16	15~25	0.08~0.2	15~25	0.08~0.24
M	Stainless Steel	(<200HB)	8~15	0.08~0.16	8~15	0.08~0.18	8~15	0.08~0.2
K	Cast Iron	(<350Mpa)	35~60	0.1~0.32	35~60	0.1~0.36	35~60	0.1~0.4
	Ductile Cast Iron	(<450Mpa)	20~45	0.1~0.24	20~45	0.1~0.28	20~45	0.1~0.32
N	Aluminum <12% Si	-	110~195	0.12~0.32	110~195	0.12~0.36	110~195	0.12~0.4
	Aluminum >12% Si	-	105~180	0.12~0.32	105~180	0.12~0.36	105~180	0.12~0.4
S	Heat Resistant Alloy	-	8~15	0.08~0.16	8~15	0.08~0.18	8~15	0.08~0.2
H	Hardened Material	-	-	-	-	-	-	-

**Technical Data**

**Troubleshooting**

Trouble	Occurrences	Countermeasures
Hole size gets larger	Run out at machine spindle, sleeve and reamer.	Check for any run out of reamer diameter and biting section.
	Cutting speed or feed rate too high.	Reduce cutting speed or feed rate.
	Bevel lead angle too big.	Reduce bevel lead angle.
Hole size gets smaller	The outer diameter of the reamer is seriously worn.	Use a new reamer
	Cutting speed or feed rate too low.	Increase cutting speed or feed rate.
	Heat expansion ratio of workpiece is too high.	Use cutting oil to reduce heat expansion.
Surface roughness of a hole is not sufficient	Cutting edge is worn	Use a new reamer
	Cutting condition too high.	Reduce cutting condition.
	Stock amount is too large.	Reduce stock amount.

**Cutting stock amount**

Working diameter	Stock amount (mm)
$\varnothing < 6$	0.1 ~ 0.2
$6 \leq \varnothing \leq 16$	0.2 ~ 0.3
$\varnothing > 16$	0.3 ~ 0.4