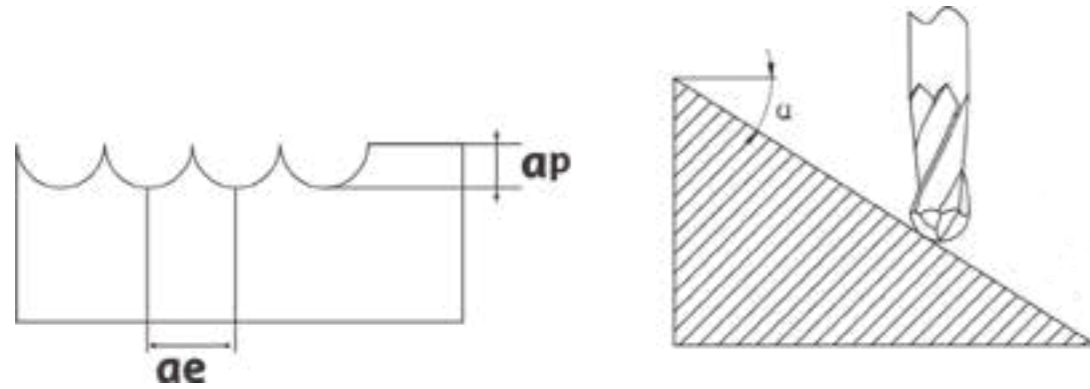


최대 가공 깊이



- ✔ Please select high-precision machine and tool holder.
고정도 장비 및 홀더를 사용하세요.
- ✔ When the machine rigidity and workpiece fixture stability is low, vibration and abnormal noise may be generated. Please reduce the rotating speed and feed speed stated above correspondingly.
장비강성이 약하거나 피삭재 고정이 안정하지 않아 떨림이 발생한다면 회전 속도 및 테이블 이송을 줄이세요.
- ✔ Please use air cooling or MQL.
공랭기나 MQL 사용을 추천합니다.
- ✔ If inclination angle a over 15° , please reduce the speed to 50~80% of above table.
15도 이상의 경사각일시 상기 테이블의 50~80% 수준의 속도로 낮추세요.
- ✔ Make overhang of tool as short as possible in conditions of non-interference.
가능한 짧은 오버행 공구를 사용하세요.

SERIES FOR HIGH- TEMPERATURE ALLOY

난삭재 (HSRA) 용
엔드밀 시리즈

EROS



Product series

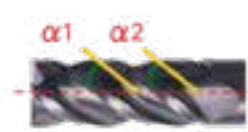
EROS

Series For High Temperature Alloy 난삭재 (HSRA)용 시리즈



Variable core thickness groove design, suitable for workpiece of weak rigidity or thin-wall processing

두께가 얇은 측면가공 및 강성이 약한 피삭재 가공에 적합한 코어 디자인



$\beta 1 \neq \beta 2$

$\alpha 1 \neq \alpha 2$

Unique cutting edge design ensures high rigidity and excellent vibration resistance

더블헬릭스 앵글 및 부등분할 적용 독자적인 인선 디자인으로 높은 강도와 떨림 방지



The arc design of the center edge of the ball head extends

볼 헤드 중심 마크 디자인 인선

Application Cases | 절삭평가 사례

Machined parts 가공 부위	Workpiece material 피삭재	Tool to use 사용 공구	Processing machine 가공 방법	Cooling method 절삭유
Blades 블레이드	GH4133B	D12R6 four-blade ball head	Baoji three-axis vertical adding machine without turntable part 3축 버티컬 가공	Water Cooling 수냉식

Machining parameters 절삭조건

Blade root 블레이드 축	S=1320 F=318 AP=15~20mm AE=1mm	Blade face 블레이드 단면	S=1320 F=520 AP=15~20mm AE=1mm
----------------------	--------------------------------	-----------------------	--------------------------------

Reach the customer's current tool life 현 사용 공구 수명

6~7 piece for per side for D12R6 / 6~7개 가공

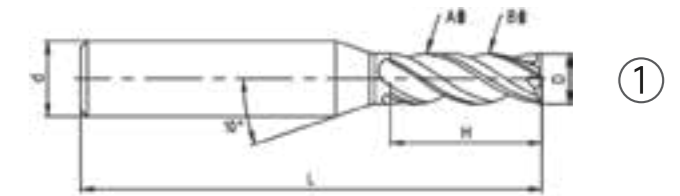


ER-SGS4

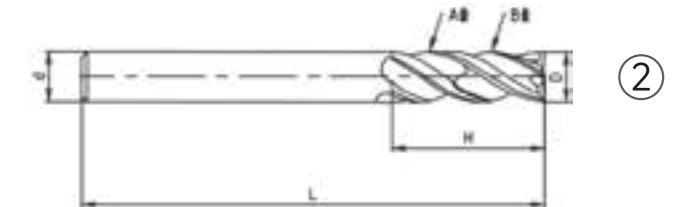
4-Flute Straight Shank

Flat End Mills

4날 스퀘어 엔드밀



①



②

✓ Suitable for side processing, step processing and right-angle groove processing
측면가공, 경사 가공, 우측 경사 홈가공에 적합

Diameter Tolerance 직경 공차 :

D1~D6 $_{-0.02}^{0}$ / D7~D20 $_{-0.025}^{0}$



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
ER-SGS4020-S	2	4	6	50	4	①	●
ER-SGS4040-S	4	4	11	50	4	②	●
ER-SGS4060	6	6	16	50	4	②	●
ER-SGS4080	8	8	24	60	4	②	●
ER-SGS4100	10	10	25	75	4	②	●
ER-SGS4120	12	12	30	75	4	②	●
ER-SGS4140	14	14	35	90	4	②	●
ER-SGS4160	16	16	35	90	4	②	●
ER-SGS4200	20	20	45	100	4	②	●
ER-SGS4250	25	25	50	100	4	②	●

● Stock Available 재고관리

▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄합금	Titanium Alloy 티타늄합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
○	○					○				○	◎

Hardness unit 경도 : HRC

◎ Very Suitable 1차 추천

○ Suitable 2차 추천

HIGH TEMPERATURE ALLOY MACHINING

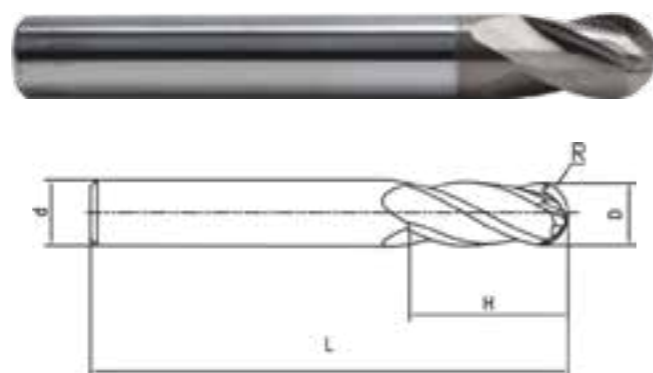
EROS

ER-BAS4

4-Flute Straight Shank

Ball Nose End Mills

4날 볼 엔드밀



✔ Suitable for side processing, step processing and right-angle groove processing
측면 가공, 경사 가공, 우측 경사 홈가공에 적합

Diameter Tolerance 직경 공차 : D1~D20_{-0.02}

R ± 0.005



TYPE 형번	BASIC DIMENSION 치수 (mm)					NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
ER-BAS4060-R3.0	6	3	6	9	50	4	①	●
ER-BAS4080-R4.0	8	4	8	12	60	4	①	●
ER-BAS4100-R5.0	10	5	10	15	75	4	①	●
ER-BAS4120-R6.0	12	6	12	18	75	4	①	●
ER-BAS4160-R8.0	16	8	16	24	85	4	①	●
ER-BAS4200-R10.0	20	10	20	30	100	4	①	●

● Stock Available 재고관리

▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하드강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
○	○										○

Hardness unit 경도 : HRC

◎ Very Suitable 1차 추천

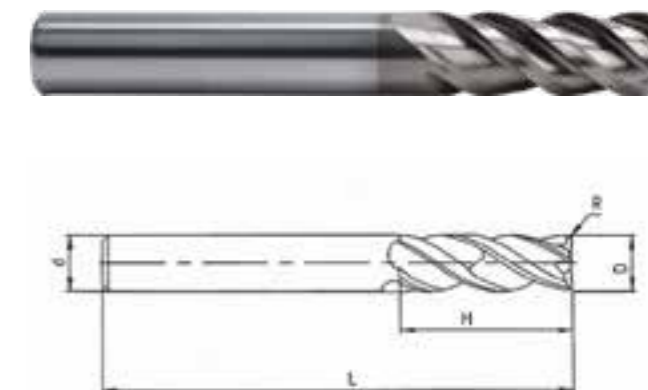
○ Suitable 2차 추천

ER-RAS4

4-Flute Straight Shank

Corner Radius End Mills

4날 래디우스 엔드밀



✔ Suitable for R-shaped processing, profiling processing and R-groove processing
코너 R 가공 및 프로파일 가공, R 홈가공에 적합

Diameter Tolerance 직경 공차 : D1~D20_{-0.02}

R ± 0.01



TYPE 형번	BASIC DIMENSION 치수 (mm)					NUMBER OF FLUTE / 날수 Z	STOCK 재고
	D	R	d	H	L		
ER-RAS4060-R0.2	6	0.2	6	16	50	4	●
ER-RAS4060-R0.3	6	0.3	6	16	50	4	●
ER-RAS4060-R0.5	6	0.5	6	16	50	4	●
ER-RAS4060-R0.75	6	0.75	6	16	50	4	●
ER-RAS4060-R0.8	6	0.8	6	16	50	4	●
ER-RAS4060-R1.0	6	1.0	6	16	50	4	●
ER-RAS4080-R0.2	8	0.2	8	20	60	4	●
ER-RAS4080-R0.3	8	0.3	8	20	60	4	●
ER-RAS4080-R0.5	8	0.5	8	20	60	4	●
ER-RAS4080-R0.6	8	0.6	8	20	60	4	●
ER-RAS4080-R0.75	8	0.75	8	20	60	4	●
ER-RAS4080-R1.0	8	1.0	8	20	60	4	●
ER-RAS4080-R2.0	8	2.0	8	20	60	4	●
ER-RAS4100-R0.2	10	0.2	10	25	75	4	●
ER-RAS4100-R0.3	10	0.3	10	25	75	4	●
ER-RAS4100-R0.5	10	0.5	10	25	75	4	●
ER-RAS4100-R0.75	10	0.75	10	25	75	4	●
ER-RAS4100-R1.0	10	1.0	10	25	75	4	●
ER-RAS4100-R1.5	10	1.5	10	25	75	4	●
ER-RAS4100-R2.0	10	2.0	10	25	75	4	●
ER-RAS4120-R0.2	12	0.2	12	30	75	4	●
ER-RAS4120-R0.3	12	0.3	12	30	75	4	●
ER-RAS4120-R0.5	12	0.5	12	30	75	4	●

HIGH TEMPERATURE
ALLOY MACHINING

EROS

TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	STOCK 재고
	D	R	d	H	L		
ER-RAS4120-R0.75	12	0.75	12	30	75	4	●
ER-RAS4120-R1.0	12	1.0	12	30	75	4	●
ER-RAS4120-R1.5	12	1.5	12	30	75	4	●
ER-RAS4120-R2.0	12	2.0	12	30	75	4	●
ER-RAS4120-R2.5	12	2.5	12	30	75	4	●
ER-RAS4120-R3.0	12	3.0	12	30	75	4	●
ER-RAS4140-R0.2	14	0.2	14	35	90	4	●
ER-RAS4140-R0.3	14	0.3	14	35	90	4	●
ER-RAS4140-R0.5	14	0.5	14	35	90	4	●
ER-RAS4140-R0.75	14	0.75	14	35	90	4	●
ER-RAS4140-R1.0	14	1.0	14	35	90	4	●
ER-RAS4140-R1.5	14	1.5	14	35	90	4	●
ER-RAS4140-R2.0	14	2.0	14	35	90	4	●
ER-RAS4140-R2.5	14	2.5	14	35	90	4	●
ER-RAS4140-R3.0	14	3.0	14	35	90	4	●
ER-RAS4160-R0.2	16	0.2	16	35	90	4	●
ER-RAS4160-R0.3	16	0.3	16	35	90	4	●
ER-RAS4160-R0.5	16	0.5	16	35	90	4	●
ER-RAS4160-R0.75	16	0.75	16	35	90	4	●
ER-RAS4160-R1.0	16	1.0	16	35	90	4	●
ER-RAS4160-R1.5	16	1.5	16	35	90	4	●
ER-RAS4160-R2.0	16	2.0	16	35	90	4	●
ER-RAS4160-R2.5	16	2.5	16	35	90	4	●
ER-RAS4160-R3.0	16	3.0	16	35	90	4	●
ER-RAS4160-R4.0	16	4.0	16	35	90	4	●

● Stock Available 재고관리 ▲ Make to order 주문제작

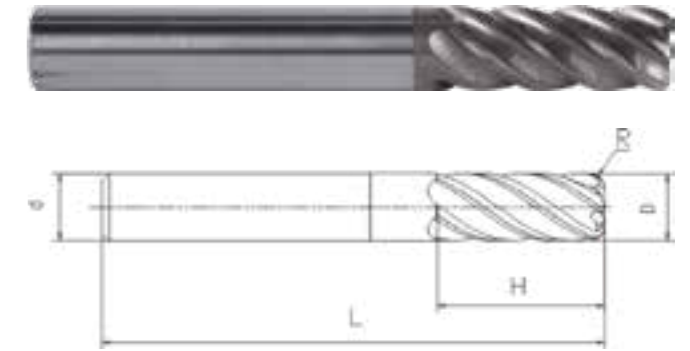
WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
○	○				○					○	◎

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

ER-RAS5

**5-Flute Straight Shank
Corner Radius End Mills**
5날 레디우스 엔드밀



✔ Suitable for R-shaped processing, profiling processing and R-groove processing
코너 R 가공 및 프로파일 가공, R 홈가공에 적합

Diameter Tolerance 직경 공차 : D1~D20_{0,02}

R ± 0.01



TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	STOCK 재고
	D	R	d	H	L		
ER-RAS5060-R0.2	6	0.2	6	16	50	5	●
ER-RAS5060-R0.3	6	0.3	6	16	50	5	●
ER-RAS5060-R0.5	6	0.5	6	16	50	5	●
ER-RAS5060-R0.75	6	0.75	6	16	50	5	●
ER-RAS5060-R1.0	6	1.0	6	16	50	5	●
ER-RAS5080-R0.2	8	0.2	8	20	60	5	●
ER-RAS5080-R0.3	8	0.3	8	20	60	5	●
ER-RAS5080-R0.5	8	0.5	8	20	60	5	●
ER-RAS5080-R0.75	8	0.75	8	20	60	5	●
ER-RAS5080-R1.0	8	1.0	8	20	60	5	●
ER-RAS5080-R2.0	8	2.0	8	20	60	5	●
ER-RAS5100-R0.2	10	0.2	10	25	75	5	●
ER-RAS5100-R0.3	10	0.3	10	25	75	5	●
ER-RAS5100-R0.5	10	0.5	10	25	75	5	●
ER-RAS5100-R0.75	10	0.75	10	25	75	5	●
ER-RAS5100-R1.0	10	1.0	10	25	75	5	●
ER-RAS5100-R1.5	10	1.5	10	25	75	5	●
ER-RAS5100-R2.0	10	2.0	10	25	75	5	●
ER-RAS5120-R0.2	12	0.2	12	30	75	5	●
ER-RAS5120-R0.3	12	0.3	12	30	75	5	●
ER-RAS5120-R0.5	12	0.5	12	30	75	5	●

HIGH TEMPERATURE ALLOY MACHINING

EROS

TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	STOCK 재고
	D	R	d	H	L		
ER-RAS5120-R0.75	12	0.75	12	30	75	5	●
ER-RAS5120-R1.0	12	1.0	12	30	75	5	●
ER-RAS5120-R1.5	12	1.5	12	30	75	5	●
ER-RAS5120-R2.0	12	2.0	12	30	75	5	●
ER-RAS5120-R2.5	12	2.5	12	30	75	5	●
ER-RAS5120-R3.0	12	3.0	12	30	75	5	●
ER-RAS5140-R0.2	14	0.2	14	35	90	5	●
ER-RAS5140-R0.3	14	0.3	14	35	90	5	●
ER-RAS5140-R0.5	14	0.5	14	35	90	5	●
ER-RAS5140-R0.75	14	0.75	14	35	90	5	●
ER-RAS5140-R1.0	14	1.0	14	35	90	5	●
ER-RAS5140-R1.5	14	1.5	14	35	90	5	●
ER-RAS5140-R2.0	14	2.0	14	35	90	5	●
ER-RAS5140-R2.5	14	2.5	14	35	90	5	●
ER-RAS5140-R3.0	14	3.0	14	35	90	5	●
ER-RAS5160-R0.2	16	0.2	16	35	90	5	●
ER-RAS5160-R0.3	16	0.3	16	35	90	5	●
ER-RAS5160-R0.5	16	0.5	16	35	90	5	●
ER-RAS5160-R0.75	16	0.75	16	35	90	5	●
ER-RAS5160-R1.0	16	1.0	16	35	90	5	●
ER-RAS5160-R1.5	16	1.5	16	35	90	5	●
ER-RAS5160-R2.0	16	2.0	16	35	90	5	●
ER-RAS5160-R2.5	16	2.5	16	35	90	5	●
ER-RAS5160-R3.0	16	3.0	16	35	90	5	●
ER-RAS5160-R4.0	16	4.0	16	35	90	5	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄합금	Titanium Alloy 티타늄합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
○	○				○				○	◎	

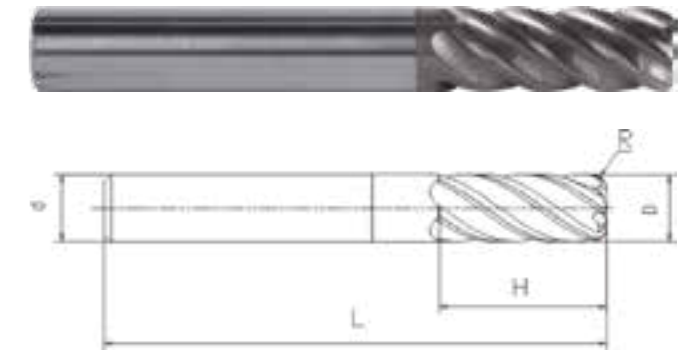
Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

ER-RAS6

6-Flute Straight Shank

Corner Radius End Mills

6날 라디우스 엔드밀



✔ Suitable for R-shaped processing, profiling processing and R-groove processing
코너 R 가공 및 프로파일 가공, R 홈가공에 적합

Diameter Tolerance 직경 공차 : D1~D20_{-0.02}

R ± 0.01



TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	STOCK 재고
	D	R	d	H	L		
ER-RAS6100-R1.0	10	1.0	10	25	75	6	●
ER-RAS6100-R2.0	10	2.0	10	25	75	6	●
ER-RAS6120-R1.0	12	1.0	12	30	75	6	●
ER-RAS6120-R2.0	12	2.0	12	30	75	6	●
ER-RAS6120-R3.0	12	3.0	12	30	75	6	●
ER-RAS6140-R1.0	14	1.0	14	35	90	6	●
ER-RAS6140-R2.0	14	2.0	14	35	90	6	●
ER-RAS6140-R3.0	14	3.0	14	35	90	6	●
ER-RAS6160-R1.0	16	1.0	16	35	90	6	●
ER-RAS6160-R2.5	16	2.5	16	35	90	6	●
ER-RAS6160-R4.0	16	4.0	16	35	90	6	●

● Stock Available 재고관리 ▲ Make to order 주문제작

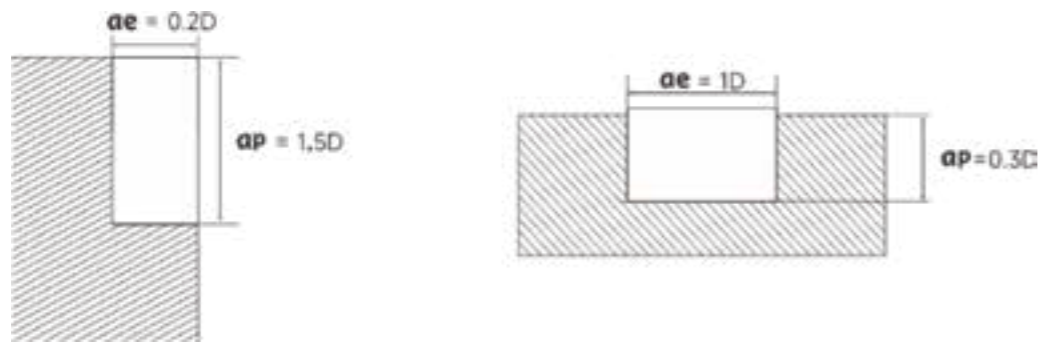
WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄합금	Titanium Alloy 티타늄합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
○	○				○				○	◎	

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

ER-SGS4,5/-RAS4,5 Cutting Parameters 추천절삭조건

Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
6	1592	0.012~0.025
8	1195	0.013~0.029
10	955	0.016~0.035
12	796	0.016~0.038
14	682	0.018~0.041
16	597	0.018~0.045
20	478	0.018~0.049
25	382	0.019~0.051

최대 가공 깊이

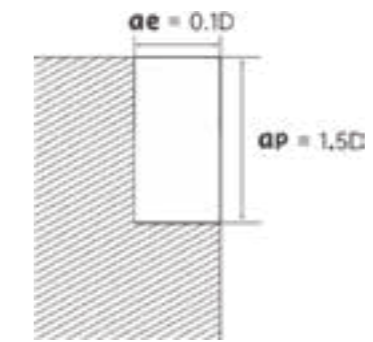


- ✔ The above table is the standard value for side milling. For grooving, the rotating speed should be 80%-100% of the above table, and the feed speed should be 60%-80% of the above table as the standard value
상기 추천 절삭 조건은 측면 가공용입니다. 홈 가공시 상기 조건에서 회전속도 80~100%, 피드속도는 60~80%으로 감속하여 사용하세요.
- ✔ Please use high-rigidity, high-precision machine tools and tool holders, and it is recommended to use non-water-soluble cutting fluid
고정도 장비 및 홀더 그리고 비수용성 절삭유 사용을 추천합니다.
- ✔ Adjust the Rotating speed and Feed speed according to the cutting depth and machine tool rigidity, and down milling is recommended
절입양 및 장비강성에 따라 회전속도 및 이송 속도 조정이 필요하며 하향절삭을 추천합니다.
- ✔ Keep the tool overhang length as short as possible without interference
가능한 짧은 오버행 공구를 사용하세요.

ER-SGS6/-RAS6,7 Cutting Parameters 추천절삭조건

Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
10	955	0.016~0.035
12	796	0.016~0.038
14	682	0.018~0.041
16	597	0.018~0.045
20	478	0.018~0.049
25	382	0.019~0.051

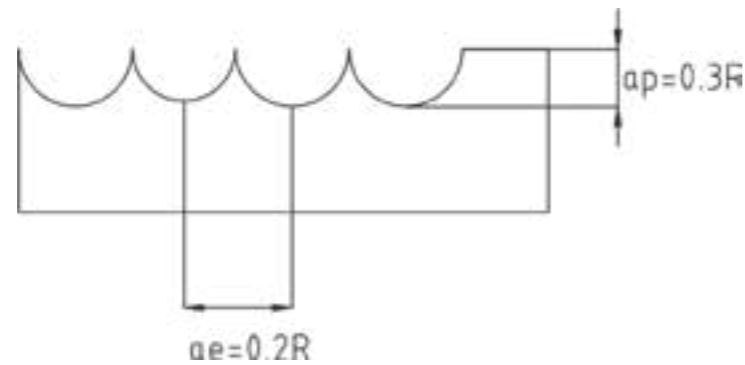
최대 가공 깊이



- ✔ Keep the tool overhang length as short as possible without interference
가능한 짧은 오버행 공구를 사용하세요.
- ✔ The above table is the standard value for side milling. For cutting grooving please use a 4-flute or 5-flute end mills
위 표는 사이드 밀링 기준값입니다. 홈 가공에는 4날 또는 5날 엔드밀을 사용하십시오.
- ✔ Please use high-rigidity, high-precision machine tools and tool holders, and it is recommended to use non-water-soluble cutting fluid
고정도 장비 및 홀더 그리고 비수용성 절삭유 사용을 추천합니다.
- ✔ Adjust the Rotating speed and Feed speed according to the cutting depth and machine tool rigidity, and down milling is recommended
절입양 및 장비강성에 따라 회전속도 및 이송 속도 조정이 필요하며 하향절삭을 추천합니다.

ER-BAS4 Cutting Parameters 추천절삭조건		
Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
6	1858	0.02~0.05
8	1393	0.025~0.07
10	1115	0.03~0.08
12	928	0.032~0.085
14	696	0.04~0.012
16	557	0.041~0.13

최대 가공 깊이



- ✔ The above table is the standard value for side milling. For grooving, the rotating speed should be 80%-100% of the above table, and the feed speed should be 60%-80% of the above table as the standard value
 상기 추천 절삭 조건은 측면 가공용입니다. 홈 가공시 상기 조건에서 회전속도 80~100%, 피드속도는 60~80%로 감속하여 사용하세요.
- ✔ Please use high-rigidity, high-precision machine tools and tool holders, and it is recommended to use non-water-soluble cutting fluid
 고정도 장비 및 홀더 그리고 비수용성 절삭유 사용을 추천합니다.
- ✔ Adjust the Rotating speed and Feed speed according to the cutting depth and machine tool rigidity, and down milling is recommended
 절입양 및 장비강성에 따라 회전속도 및 이송 속도 조정이 필요하며 하향절삭을 추천합니다.
- ✔ Keep the tool overhang length as short as possible without interference
 가능한 짧은 오버행 공구를 사용하세요.

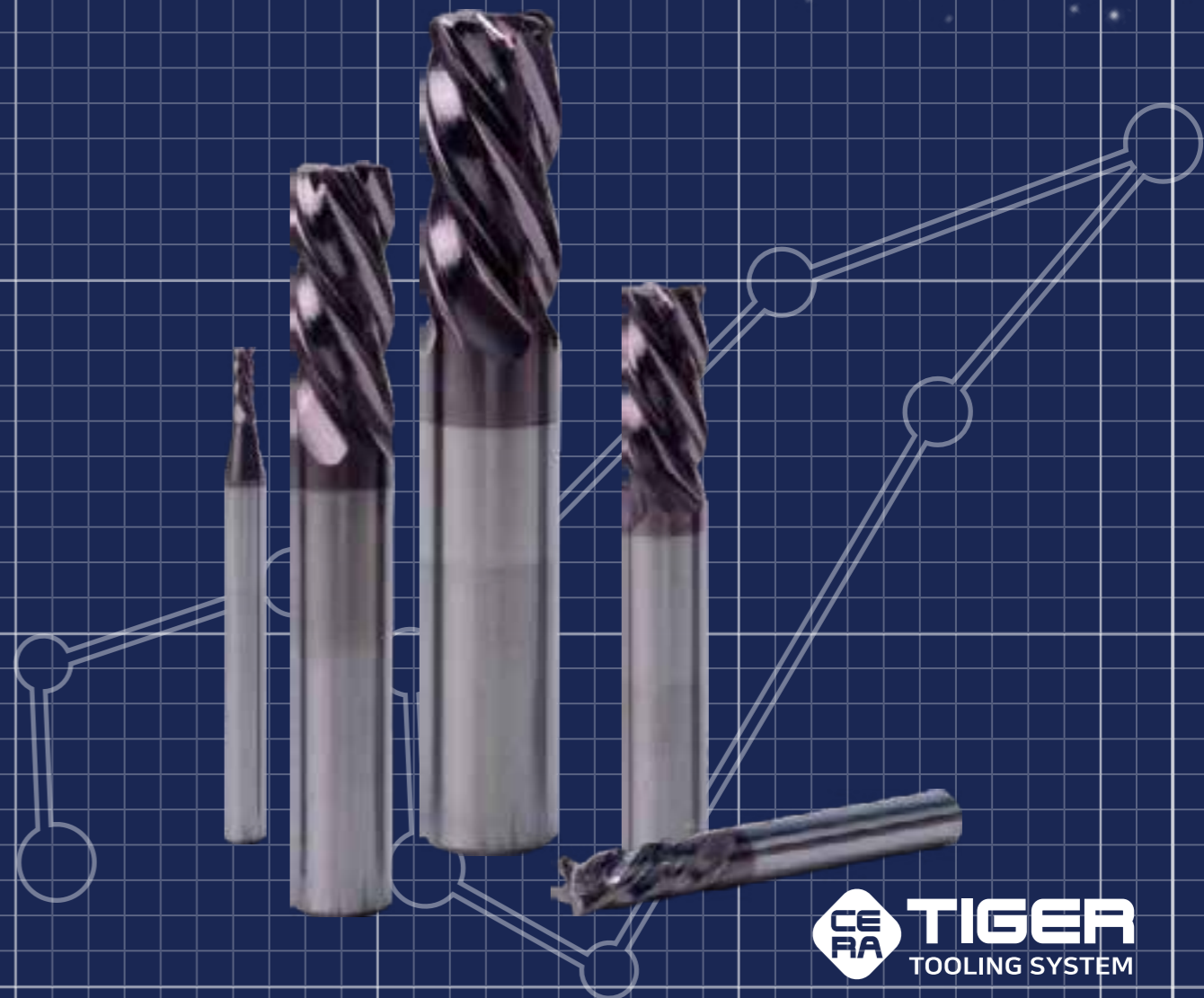
HIGH TEMPERATURE ALLOY MACHINING

SERIES FOR STAINLESS STEEL MACHINING

스테인레스 가공용 엔드밀 시리즈



APOLLON



APOLLON



Product series

APOLLON

Series For Stainless Steel Machining

스테인레스 가공용 시리즈

- 1 The design of unequal spirals and unequal teeth can achieve stable and efficient processing, with a good processing surface and no vibration lines
부등분할 디자인으로 떨림 최소화 및 안정적인 가공 실현
- 2 The spiral groove adopts a U-shaped groove structure design to increase the chip holding space and facilitate chip discharge
U자형 그루브 구조로 칩 공간 확보 및 칩 막힘 방지
- 3 The peripheral edge flank surface has high grinding quality, which avoids adhesive wear and improves the surface quality of the workpiece and tool life.
바깥쪽 표면처리로 강성 확보 및 용착 방지 그리고 표면 조도 및 수명 증대



End structure 특징

- 1 Unequal tooth structure to increase vibration resistance
독자적인 인선 디자인으로 높은 강도와 떨림 방지
- 2 Double GASH structure ensures rigidity while increasing chip space
이중 GASH 구조로 강성 증대



The peripheral edge flank surface has higher grinding quality
바깥쪽 표면 처리로 용착 방지

U-shaped groove structure design to increase the chip holding space
U자형 그루브 구조로 칩 공간 확보 및 칩 막힘 방지

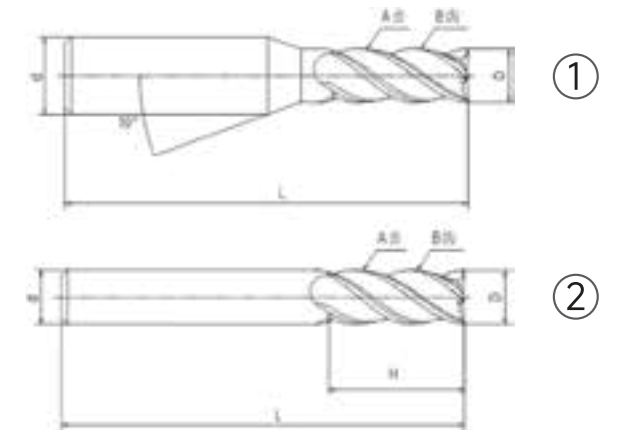
AP-SGM4

4-Flute Straight Shank

Flat End Mills

4날 스퀘어 엔드밀

- Most suitable for side milling and shallow groove processing
측면가공 및 홈가공에 적합
- Wide range of applications
다양한 영역에 적용 가능



Diameter Tolerance 직경 공차 :
D1~D6 $_{-0.02}$ / D7~D20 $_{-0.025}$



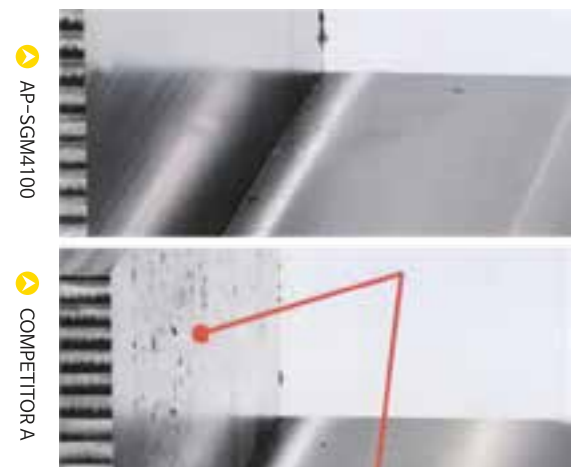
TYPE 형번	BASIC DIMENSION 치수(mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
AP-SGM4020-S	2.0	4	6	50	4	①	●
AP-SGM4030-S	3.0	4	9	50	4	①	●
AP-SGM4040-S	4.0	4	11	50	4	②	●
AP-SGM4040	4.0	6	11	50	4	①	●
AP-SGM4050	5.0	6	13	50	4	①	●
AP-SGM4060	6.0	6	16	50	4	②	●
AP-SGM4080	8.0	8	20	60	4	②	●
AP-SGM4100	10.0	10	25	75	4	②	●
AP-SGM4120	12.0	12	26	75	4	②	●
AP-SGM4160	16.0	16	40	100	4	②	●
AP-SGM4200	20.0	20	40	100	4	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄합금	Titanium Alloy 티타늄합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
◎	◎	◎	◎	◎	◎	○	○	○	◎	○	

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천



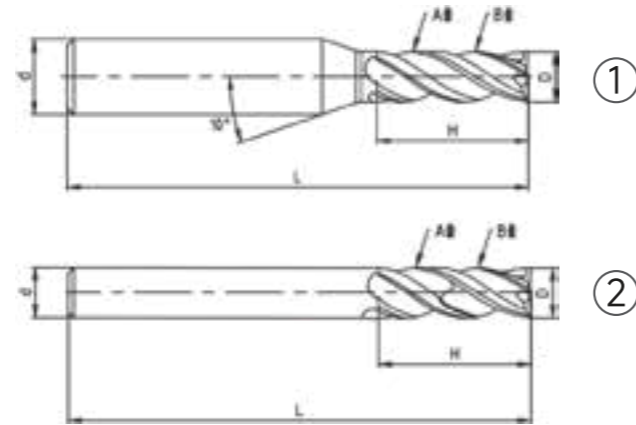
DESIGNATION	형번	AP-SGM4100
WORK PIECE MATERIAL	피삭재	SUS304
MACHINING	가공	Side Milling
CUTTING VELOCITY	절삭속도	130m/min (S4100)
F	테이블 이송	1230mm/min (0.3mm/rev)
ap	축 방향 - 절삭 깊이	26mm
ae	반경 방향 - 절삭 폭	0.2mm
COOLING METHOD	절삭유	Water Soluble Cutting Oil
MACHINE	장비	Vertical Machining Centre

AP-RAM4

4-Flute Straight Shank

Corner Radius End Mills

4날 래디우스 엔드밀



Wide application range, A variety of shapes can be processed
넓은 적용 범위, 다양한 형상 가공 가능

Diameter Tolerance 직경 공차 :

D1~D6_{-0.02} / D7~D20_{-0.025}

R±0.01



TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
AP-RAM4020-R0.2S	2.0	0.2	4	6	50	4	①	●
AP-RAM4030-R0.5S	3.0	0.5	4	8	50	4	①	●
AP-RAM4040-R0.5S	4.0	0.5	4	11	50	4	②	●
AP-RAM4040-R0.5	4.0	0.5	6	11	50	4	①	●
AP-RAM4050-R0.5	5.0	0.5	6	13	50	4	①	●
AP-RAM4060-R0.5	6.0	0.5	6	16	50	4	②	●
AP-RAM4060-R1.0	6.0	1.0	6	16	50	4	②	●
AP-RAM4080-R0.5	8.0	0.5	8	20	60	4	②	●
AP-RAM4080-R1.0	8.0	1.0	8	20	60	4	②	●
AP-RAM4100-R0.5	10.0	0.5	10	25	75	4	②	●
AP-RAM4100-R1.0	10.0	1.0	10	25	75	4	②	●
AP-RAM4100-R2.0	10.0	2.0	10	25	75	4	②	●
AP-RAM4120-R0.5	12.0	0.5	12	26	75	4	②	●
AP-RAM4120-R1.0	12.0	1.0	12	26	75	4	②	●
AP-RAM4120-R2.0	12.0	2.0	12	26	75	4	②	●
AP-RAM4120-R3.0	12.0	3.0	12	26	75	4	②	●
AP-RAM4160-R0.5	16.0	0.5	16	40	100	4	②	▲
AP-RAM4160-R1.0	16.0	1.0	16	40	100	4	②	●
AP-RAM4160-R1.5	16.0	1.5	16	40	100	4	②	▲
AP-RAM4160-R2.0	16.0	2.0	16	40	100	4	②	●
AP-RAM4160-R3.0	16.0	3.0	16	40	100	4	②	▲

TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
AP-RAM4200-R0.5	20.0	0.5	20	40	100	4	②	▲
AP-RAM4200-R1.0	20.0	1.0	20	40	100	4	②	▲
AP-RAM4200-R2.0	20.0	2.0	20	40	100	4	②	●
AP-RAM4200-R3.0	20.0	3.0	20	40	100	4	②	▲

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄합금	Titanium Alloy 티타늄합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
◎	◎	◎	◎			◎	○		◎	○	

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

AP-SGM4/RAM4 Cutting Parameters (General machining) 추천절삭조건 (범용절삭)										
Workpiece Material 피삭재	Cast Iron Carbon steel Alloy steel 회주철 / 탄소강 / 합금강 ~30HRC		Stainless steel 스테인레스강		Pre-hardened steel Hardened steel and tempered steel 프리하든강 / 고경도강 / 합금강 ~40HRC		Pre-hardened steel Hardened steel and tempered steel 프리하든강 / 고경도강 / 합금강 ~50HRC		Titanium alloy Heat temperature alloy 티타늄 합금 / 고온합금강	
	Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)
2	40000	960	22300	350	32000	385	25000	330	9600	310
4	15500	1150	7400	350	10600	545	8500	335	4800	325
5	15500	1150	5550	445	8000	665	6500	450	3800	345
6	9500	1270	4450	445	6400	665	5000	455	3200	375
8	8000	1270	4450	445	6400	665	5000	455	4455	405
10	6000	1575	2750	500	4000	850	3200	535	1910	400
12	4800	1455	2200	520	3200	785	2500	535	1600	425
16	4000	1330	1850	520	2650	740	2100	505	1200	440
20	3000	1270	1350	535	2000	725	1600	455	960	450

- Please select high-precision machine and tool holder.
고경도 장비 및 홀더를 사용하세요.
- Please adjust the Rotating speed and Feed speed appropriately according to the cutting speed, equipment rigidity, etc.
장비의 강성 및 절삭량에 따라 피드 및 속도를 조절하세요.
- The above table is formulated based on the tool overhang length being less than 4 times the diameter. If the tool overhang length is too long, vibration is likely to occur during processing. At this time, please adjust the Rotating speed, Feed speed and depth of cut appropriately.
상기표는 오버행 4D 이하에서 참조하세요. 오버행이 길 경우 떨림이 발생할 수 있으며 이뎀 이송과 속도를 절삭량에 맞춰 조정하시길 바랍니다.

AP-SGM4-DIN

4-Flute Straight Shank

Flat End Mills

4날 스퀘어 엔드밀

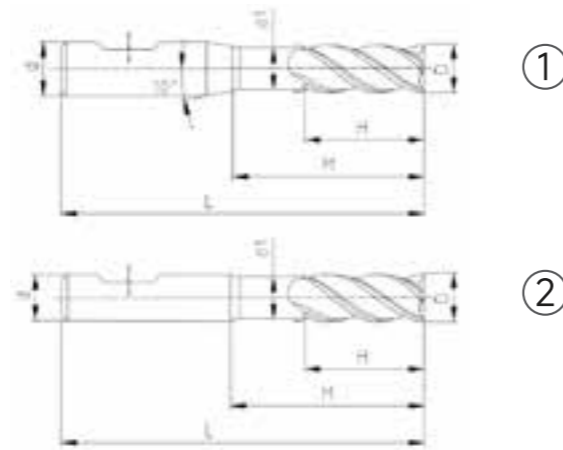
Most suitable for side milling and shallow groove processing
측면가공 및 홈가공에 적합

Wide range of applications
다양한 영역에 적용 가능

DIN 6535-HB Handle
DIN6535-HB 핸들

Diameter Tolerance 직경 공차 :

D1~D6 ± 0.015 / D7~D20 ± 0.02



TYPE 형번	BASIC DIMENSION 치수(mm)						NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	M	d1	L			
AP-SGM4010-S-DIN	1.0	4	3	7	0.9	50	4	①	●
AP-SGM4015-S-DIN	1.5	4	3	7	1.4	50	4	①	●
AP-SGM4020-S-DIN	2.0	4	6	10	1.85	50	4	①	●
AP-SGM4025-S-DIN	2.5	4	6	10	2.3	50	4	①	●
AP-SGM4030-S-DIN	3.0	4	9	14	2.7	50	4	②	●
AP-SGM4040-S-DIN	4.0	4	11	16	3.7	50	4	①	●
AP-SGM4040-DIN	4.0	6	11	16	3.7	50	4	①	●
AP-SGM4050-DIN	5.0	6	13	19	4.7	50	4	②	●
AP-SGM4060-DIN	6.0	6	16	22	5.5	50	4	②	●
AP-SGM4080-DIN	8.0	8	20	28	7.5	60	4	②	●
AP-SGM4100-DIN	10.0	10	25	35	9.2	75	4	②	●
AP-SGM4120-DIN	12.0	12	26	38	11	75	4	②	●
AP-SGM4160-DIN	16.0	16	40	52	15	100	4	②	●

● Stock Available 재고관리

▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
◎	◎	◎	◎		◎	○			◎	○	

Hardness unit 경도 : HRC

◎ Very Suitable 1차 추천

○ Suitable 2차 추천

AP-RAM4-DIN

4-Flute Straight Shank

Corner Radius End Mills

4날 라디우스 엔드밀

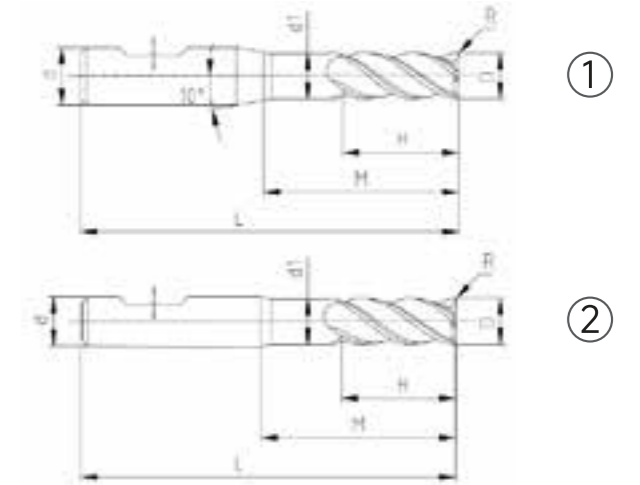
Wide application range, A variety of shapes can be processed
넓은 적용 범위, 다양한 형상 가공 가능

DIN 6535-HB Handle D1~D6
DIN6535-HB 핸들

Diameter Tolerance 직경 공차 :

D1~D6 ± 0.015 / D7~D20 ± 0.02

R ± 0.01



TYPE 형번	BASIC DIMENSION 치수(mm)							NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	R	d	H	M	d1	L			
AP-RAM4020-R0.2S-DIN	2.0	0.2	4	6	10	10	50	4	①	●
AP-RAM4030-R0.5S-DIN	3.0	0.5	4	8	13	13	50	4	①	●
AP-RAM4040-R0.5S-DIN	4.0	0.5	4	11	16	16	50	4	②	●
AP-RAM4040-R0.5-DIN	4.0	0.5	6	11	16	16	50	4	①	●
AP-RAM4050-R0.5-DIN	5.0	0.5	6	13	19	19	50	4	①	●
AP-RAM4060-R0.5-DIN	6.0	0.5	6	16	22	22	50	4	②	●
AP-RAM4060-R1.0-DIN	6.0	1.0	6	16	22	22	50	4	②	●
AP-RAM4080-R0.5-DIN	8.0	0.5	8	20	28	28	60	4	②	●
AP-RAM4080-R1.0-DIN	8.0	1.0	8	20	28	28	60	4	②	●
AP-RAM4100-R0.5-DIN	10.0	0.5	10	25	35	35	75	4	②	●
AP-RAM4100-R1.0-DIN	10.0	1.0	10	25	35	35	75	4	②	●
AP-RAM4100-R2.0-DIN	10.0	2.0	10	25	35	35	75	4	②	●
AP-RAM4120-R0.5-DIN	12.0	0.5	12	26	38	38	75	4	②	●
AP-RAM4120-R1.0-DIN	12.0	1.0	12	26	38	38	75	4	②	●
AP-RAM4120-R2.0-DIN	12.0	2.0	12	26	38	38	75	4	②	●
AP-RAM4120-R3.0-DIN	12.0	3.0	12	26	38	38	75	4	②	●
AP-RAM4160-R0.5-DIN	16.0	0.5	16	40	52	52	100	4	②	▲
AP-RAM4160-R1.0-DIN	16.0	1.0	16	40	52	52	100	4	②	●
AP-RAM4160-R1.5-DIN	16.0	1.5	16	40	52	52	100	4	②	▲
AP-RAM4160-R2.0-DIN	16.0	2.0	16	40	52	52	100	4	②	●
AP-RAM4160-R3.0-DIN	16.0	3.0	16	40	52	52	100	4	②	▲

TYPE 형번	BASIC DIMENSION 치수 (mm)							NUMBER OF FLUTE / 날수	GEOMETRY 그림	STOCK 재고
	D	R	d	H	M	d1	L	Z		
AP-RAM4200-R0.5-DIN	20.0	0.5	20	45	58	19	100	4	②	▲
AP-RAM4200-R1.0-DIN	20.0	1.0	20	45	58	19	100	4	②	▲
AP-RAM4200-R2.0-DIN	20.0	2.0	20	45	58	19	100	4	②	●
AP-RAM4200-R3.0-DIN	20.0	3.0	20	45	58	19	100	4	②	▲

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						
◎	◎	◎	◎		◎	○			◎	○	

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

AP-SGM4/RAM4-DIN Cutting Parameters (General machining) 추천절삭조건 (범용절삭)

Workpiece Material 피삭재	Cast Iron Carbon steel Alloy steel 회주철 / 탄소강 / 합금강 ~30HRC		Stainless steel 스테인레스강		Pre-hardened steel Hardened steel and tempered steel 프리하든강 / 고경도강 / 합금강 ~40HRC		Pre-hardened steel Hardened steel and tempered steel 프리하든강 / 고경도강 / 합금강 ~50HRC		Titanium alloy Heat temperature alloy 티타늄 합금 / 고온합금강	
	Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)
2	40000	960	22300	350	32000	385	25000	330	9600	310
4	15500	1150	7400	350	10600	545	8500	335	4800	325
5	15500	1150	5550	445	8000	665	6500	450	3800	345
6	9500	1270	4450	445	6400	665	5000	455	3200	375
8	8000	1270	4450	445	6400	665	5000	455	4455	405
10	6000	1575	2750	500	4000	850	3200	535	1910	400
12	4800	1455	2200	520	3200	785	2500	535	1600	425
16	4000	1330	1850	520	2650	740	2100	505	1200	440
20	3000	1270	1350	535	2000	725	1600	455	960	450

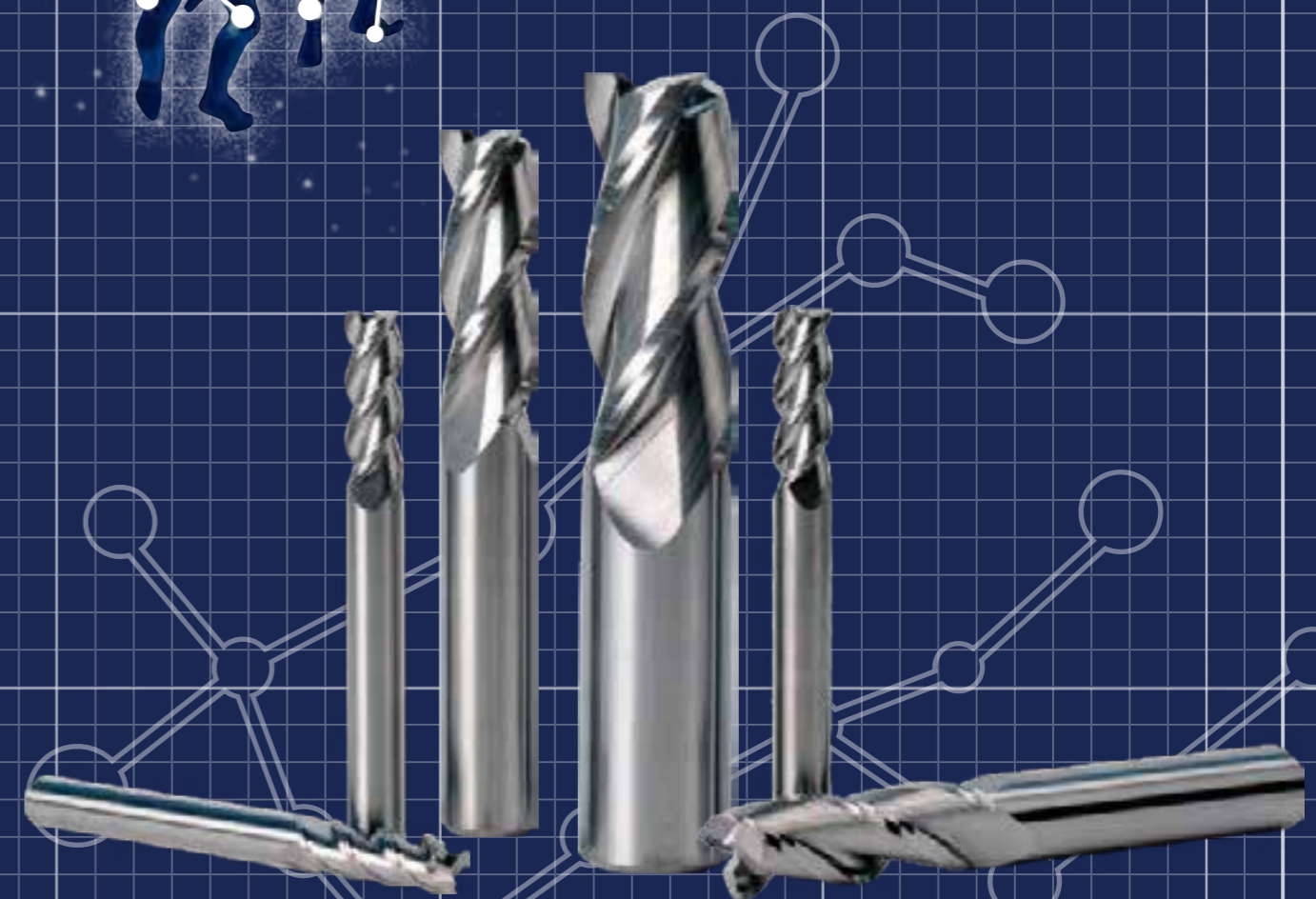
- ✔ Please select high-precision machine and tool holder. 고정도 장비 및 홀더를 사용하세요.
- ✔ Please adjust the Rotating speed and Feed speed appropriately according to the cutting speed, equipment rigidity, etc. 장비의 강성 및 절삭량에 따라 피드 및 속도를 조절하세요.
- ✔ The above table is formulated based on the tool overhang length being less than 4 times the diameter. If the tool overhang length is too long, vibration is likely to occur during processing. At this time, please adjust the Rotating speed, Feed speed and depth of cut appropriately. 상기표는 오버행 4D 이하에서 참조하세요. 오버행이 길 경우 떨림이 발생 할 수 있으며 이뎀 이송과 속도를 절삭량에 맞춰 조정하시길 바랍니다.

SERIES FOR ALUMINUM MACHINING

알루미늄 가공용 엔드밀 시리즈



GAIA



Product series

GAIA

Series For Aluminum Machining

알루미늄 가공용 시리즈



Sharp cutting edge and edge treatment technology effectively prevent the occurrence of built-up edge.

날카로운 절삭날과 GASH LAND로 구성인선 발생 방지

The unique chip groove shape also shows excellent performance in groove and cavity processing.

독자적인 칩포켓 형상으로 탁월한 칩 배출

The design of ultra-fine grains and the base material with uniform structure make it easier for the tool to achieve excellent edge grinding and processing effects.

초미립 모재사용으로 우수한 성능 보장

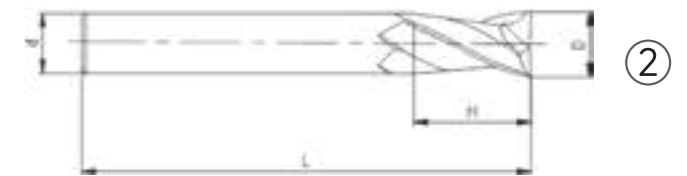
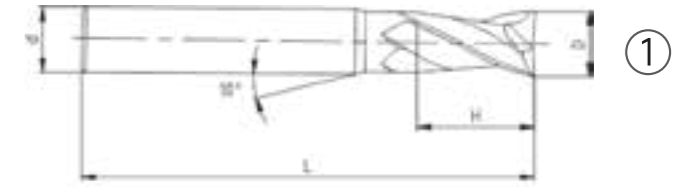
GA-SGA2

2-Flute Straight Shank

Flat End Mills

2날 스퀘어 엔드밀

- Best suited for groove milling
홈가공에 최적화
- Wide application range
다양한 적용 영역



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA2010-S	1.0	4	3	50	2	①	●
GA-SGA2015-S	1.5	4	4	50	2	①	●
GA-SGA2020-S	2.0	4	6	50	2	①	●
GA-SGA2025-S	2.5	4	8	50	2	①	●
GA-SGA2030-S	3.0	4	9	50	2	①	●
GA-SGA2035-S	3.5	4	10	50	2	①	●
GA-SGA2040-S	4.0	4	10	50	2	②	●
GA-SGA2045	4.5	6	11	50	2	①	●
GA-SGA2050	5.0	6	13	50	2	①	●
GA-SGA2055	5.5	6	14	50	2	①	●
GA-SGA2060	6.0	6	16	50	2	②	●
GA-SGA2070	7.0	8	18	60	2	②	●
GA-SGA2080	8.0	8	20	60	2	②	●
GA-SGA2090	9.0	10	23	75	2	②	●
GA-SGA2100	10.0	10	25	75	2	②	●
GA-SGA2120	12.0	12	30	75	2	②	●

Application Cases | 적용사례



DESIGNATION	형번	GA-SGA2080
WORK PIECE NAME	가공물	Car Luggage Rack
RPM	회전수	10000r/min
F	테이블 이송	1500mm/min
ap	축 방향 - 절삭 깊이	Ap=10mm
ae	반경 방향 - 절삭 폭	Ae=1mm
MACHINING	가공	Side Milling
COOLING METHOD	절삭유	Air Cooling

알루미늄 가공에 관련된 자동차 산업에 폭 넓게 사용

ALUMINUM MACHINING

GAIA

TYPE 형번	BASIC DIMENSION 치수(mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA2140	14.0	14	32	75	2	②	●
GA-SGA2160	16.0	16	36	100	2	②	●
GA-SGA2180	18.0	18	38	100	2	②	●
GA-SGA2200	20.0	20	45	100	2	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

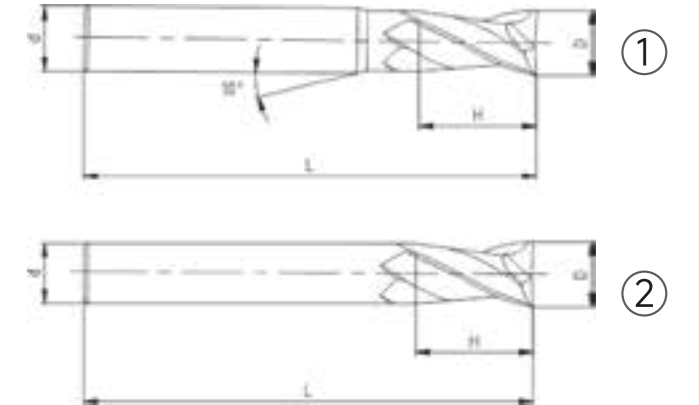
Hardness unit 경도 : HRC ○ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA2-L

2-Flute Long Cutting

Edge Flat End Mills

2날 스퀘어 롱 플루트 엔드밀



- ✓ Best suited for groove milling
홈가공에 최적화
- ✓ Wide application range
다양한 적용 영역



TYPE 형번	BASIC DIMENSION 치수(mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA2030-L	3.0	6	12	75	2	①	●
GA-SGA2040-L	4.0	6	16	75	2	①	●
GA-SGA2050-L	5.0	6	20	75	2	①	●
GA-SGA2060-L	6.0	6	25	75	2	②	●
GA-SGA2080-L	8.0	8	32	75	2	②	●
GA-SGA2100-L	10.0	10	45	100	2	②	●
GA-SGA2120-L	12.0	12	45	100	2	②	●
GA-SGA2140-L	14.0	14	50	100	2	②	●
GA-SGA2160-L	16.0	16	65	150	2	②	●
GA-SGA2200-L	20.0	20	75	150	2	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

Hardness unit 경도 : HRC ○ Very Suitable 1차 추천 ○ Suitable 2차 추천

ALUMINUM MACHINING

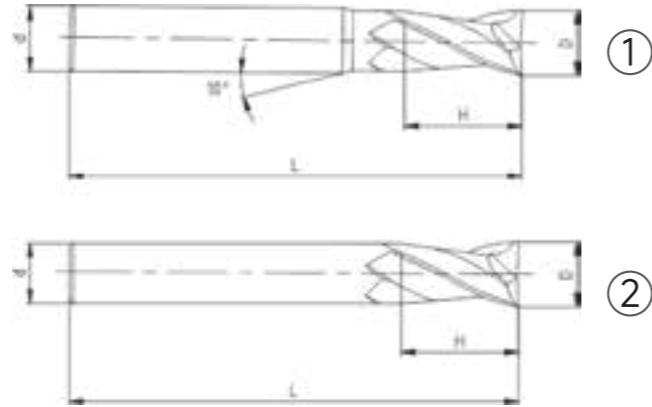
GAIA

GA-SGA2-H

2-Flute Long Cutting

Edge Flat End Mills

2날 스퀘어 롱 샹크 엔드밀



- Best suited for groove milling
홈가공에 최적화
- Wide application range
다양한 적용 영역



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA2030-H	3.0	6	9	75	2	①	●
GA-SGA2040-H	4.0	6	10	75	2	①	●
GA-SGA2050-H	5.0	6	13	75	2	①	●
GA-SGA2060-H	6.0	6	16	75	2	②	●
GA-SGA2080-H	8.0	8	20	75	2	②	●
GA-SGA2100-H	10.0	10	25	100	2	②	●
GA-SGA2120-H	12.0	12	30	100	2	②	●
GA-SGA2140-H	14.0	14	32	100	2	②	●
GA-SGA2160-H	16.0	16	36	150	2	②	●
GA-SGA2200-H	20.0	20	45	150	2	②	●

- Stock Available 재고관리
- ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

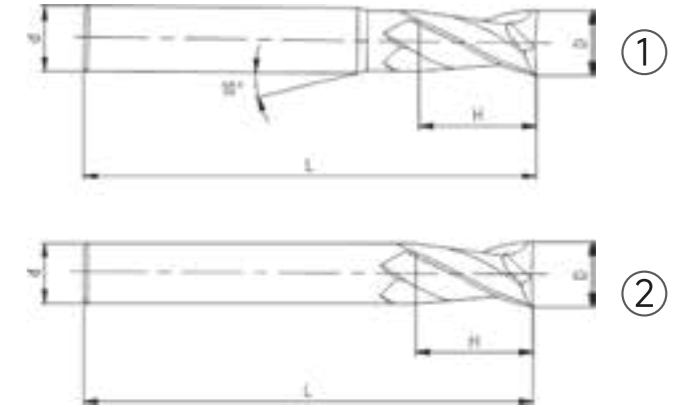
Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA2-G

2-Flute Extra Long Shank

Flat End Mills

2날 스퀘어 엑스트라 롱 샹크 엔드밀



- Best suited for groove milling
홈가공에 최적화
- Wide application range
다양한 적용 영역



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA2060-G	6.0	6	16	100	2	②	●
GA-SGA2080-G	8.0	8	20	100	2	②	●
GA-SGA2100-G	10.0	10	25	150	2	②	●
GA-SGA2120-G	12.0	12	30	150	2	②	●
GA-SGA2140-G	14.0	14	32	150	2	②	●

- Stock Available 재고관리
- ▲ Make to order 주문제작

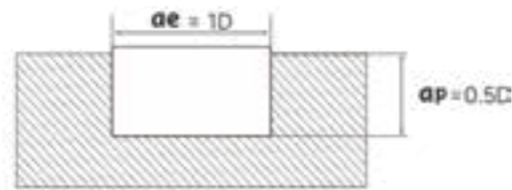
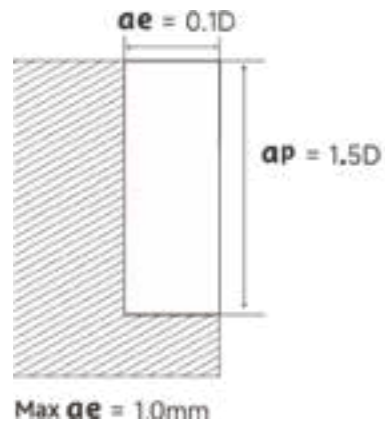
WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA2/-L/H/G Cutting Parameters 추천절삭조건				
Workpiece Material 피삭재	Aluminum alloy 알루미늄 합금		Silicon aluminum alloy Si=10% 실리콘 알루미늄 합금 Si=10%	
	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
1	40000	650	40000	500
2	40000	960	40000	750
3	26500	1250	21000	1000
4	20000	1400	16000	1100
5	16000	1500	13000	1100
6	13000	1500	10600	1100
8	10000	1600	8000	1250
10	8000	1600	6500	1250
12	6600	1650	5300	1300
14	5700	1700	4600	1350
16	5000	1700	4000	1350
18	4400	1700	3500	1350
20	4000	1700	3200	1350

최대 가공 깊이



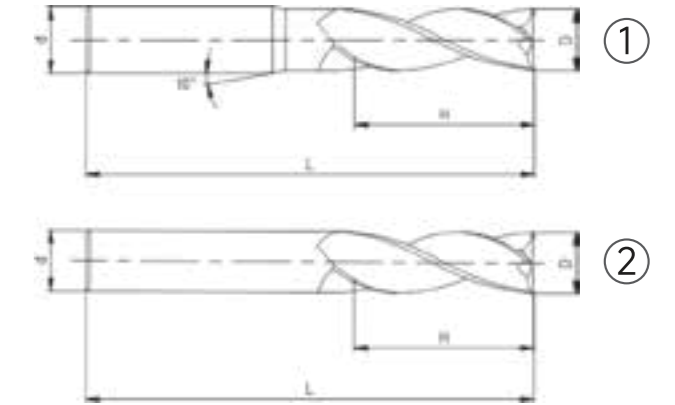
- ✓ The above table is based on the baseline values for side milling. The cutting conditions for slot milling are based on 70% of the feed speed in the table above.
측면가공시 상기표를 참조하시길 바랍니다. 홈 가공시에 70% 이상으로 사용 바랍니다.
- ✓ Please use machine tools and tool holders with high rigidity and precision. When the machine tool and workpiece are installed with poor rigidity, vibration and abnormal sounds will occur. At this time, the rotating speed and feed recommended in the above table should be reduced.
고강성, 고정밀 장비 사용을 추천합니다.
장비의 강성이 약할 경우 진동이나 소음이 발생하며 이 경우 속도 및 이송을 낮추어 사용하시길 바랍니다.
- ✓ When the cutting depth is small, the Rotating speed and Feed speed can be increased.
절입량이 적을 시 속도 및 이송을 증가 하시길 바랍니다.
- ✓ Please use water-soluble cutting fluid.
수용성 절삭유를 사용하세요.
- ✓ Down milling is recommended for side milling.
측면 가공시 하향 절삭을 추천합니다.
- ✓ Make overhang of tool as short as possible in conditions of non-interference.
가능한 짧은 오버행 공구를 사용하세요.

GA-SGA3

3-Flute Straight Shank

Flat End Mills

3날 스퀘어 엔드밀



✓ Excellent vibration resistance, can realize various processing of slot milling, side milling, drilling and milling
뛰어난 진동 방지 구조로
측면가공, 홈가공, 드릴링 가공에 최적화



TYPE 형번	BASIC DIMENSION 치수(mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA3010-S	1.0	4	3	50	3	①	●
GA-SGA3015-S	1.5	4	4	50	3	①	●
GA-SGA3020-S	2.0	4	6	50	3	①	●
GA-SGA3025-S	2.5	4	8	50	3	①	●
GA-SGA3030-S	3.0	4	9	50	3	①	●
GA-SGA3035-S	3.0	3	9	50	3	②	●
GA-SGA3040-S	3.5	4	10	50	3	①	●
GA-SGA3040	4.0	4	10	50	3	②	●
GA-SGA3045	4.5	6	11	50	3	①	●
GA-SGA3050	5.0	6	13	50	3	①	●
GA-SGA3055	5.5	6	14	50	3	①	●
GA-SGA3060	6.0	6	16	50	3	②	●
GA-SGA3070	7.0	8	18	60	3	①	●
GA-SGA3080	8.0	8	20	60	3	②	●
GA-SGA3090	9.0	10	23	75	3	②	●
GA-SGA3100	10.0	10	25	75	3	②	●

TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA3120	12.0	12	30	75	3	②	●
GA-SGA3140	14.0	14	32	75	3	②	●
GA-SGA3160	16.0	16	36	100	3	②	●
GA-SGA3180	18.0	18	38	100	3	②	●
GA-SGA3200	20.0	20	45	100	3	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

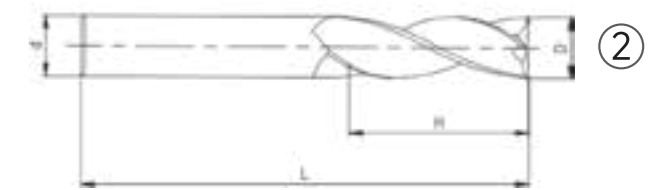
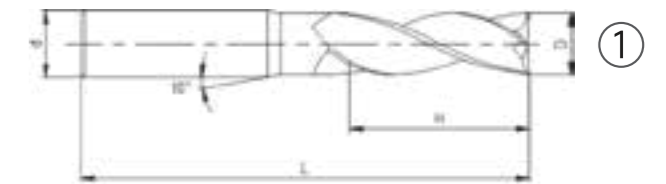
Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA3-L

3-Flute Long Cutting

Edge Flat End Mills

3날 스퀘어 롱 플루트 엔드밀



✓ Excellent vibration resistance, can realize various processing of slot milling, side milling, drilling and milling
뛰어난 진동 방지 구조로 측면가공, 홈가공, 드릴링 가공에 최적화



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA3030-L	3.0	6	12	75	3	①	●
GA-SGA3040-L	4.0	6	15	75	3	①	●
GA-SGA3050-L	5.0	6	20	75	3	①	●
GA-SGA3060-L	6.0	6	25	75	3	②	●
GA-SGA3080-L	8.0	8	32	75	3	②	●
GA-SGA3100-L	10.0	10	45	100	3	②	●
GA-SGA3120-L	12.0	12	45	100	3	②	●
GA-SGA3140-L	14.0	14	50	100	3	②	●
GA-SGA3160-L	16.0	16	65	150	3	②	●
GA-SGA3200-L	20.0	20	75	150	3	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

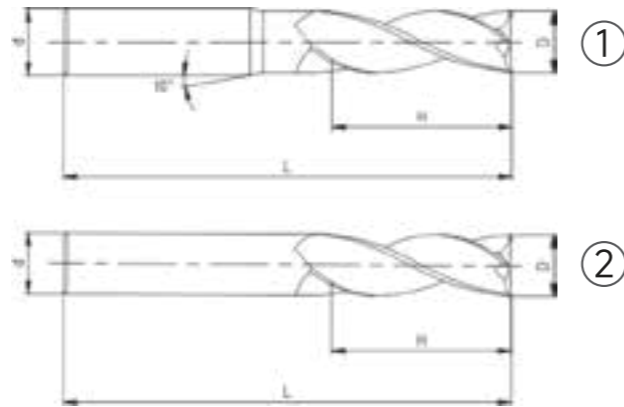
Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA3-H

3-Flute Long Shank Flat

End Mills

3날 스퀘어 롱 샹크 엔드밀



✓ Excellent vibration resistance, can realize various processing of slot milling, side milling, drilling and milling
뛰어난 진동 방지 구조로
측면가공, 홈가공, 드릴링 가공에 최적화



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA3030-H	3.0	6	9	75	3	①	●
GA-SGA3030-SH	3.0	4	9	75	3	①	●
GA-SGA3030-FH	3.0	3	9	75	3	②	●
GA-SGA3040-H	4.0	6	10	75	3	①	●
GA-SGA3040-SH	4.0	4	10	75	3	②	●
GA-SGA3050-H	5.0	6	13	75	3	①	●
GA-SGA3060-H	6.0	6	16	75	3	②	●
GA-SGA3080-H	8.0	8	20	75	3	②	●
GA-SGA3100-H	10.0	10	25	100	3	②	●
GA-SGA3120-H	12.0	12	30	100	3	②	●
GA-SGA3140-H	14.0	14	32	100	3	②	●
GA-SGA3160-H	16.0	16	36	150	3	②	●
GA-SGA3200-H	20.0	20	45	150	3	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

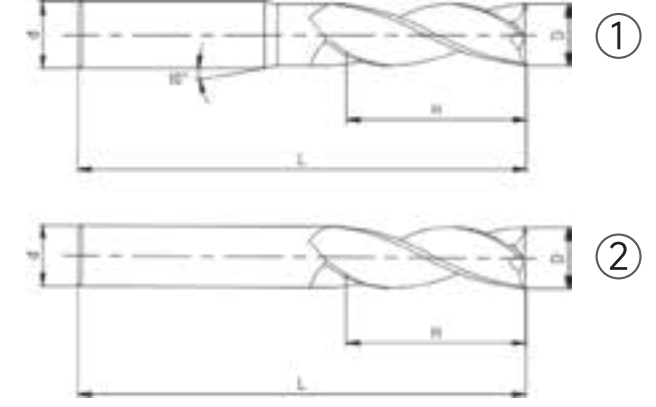
Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA3-G

3-Flute Extra Long Shank

Flat End Mills

3날 스퀘어 엑스트라 롱 샹크 엔드밀



✓ Excellent vibration resistance, can realize various processing of slot milling, side milling, drilling and milling
뛰어난 진동 방지 구조로
측면가공, 홈가공, 드릴링 가공에 최적화



TYPE 형번	BASIC DIMENSION 치수 (mm)				NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	d	H	L			
GA-SGA3060-G	6.0	6	16	100	3	②	●
GA-SGA3080-G	8.0	8	20	100	3	②	●
GA-SGA3100-G	10.0	10	25	150	3	②	●
GA-SGA3120-G	12.0	12	30	150	3	②	●
GA-SGA3140-G	14.0	14	32	150	3	②	●

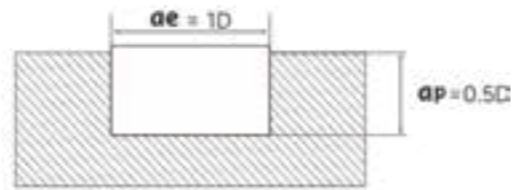
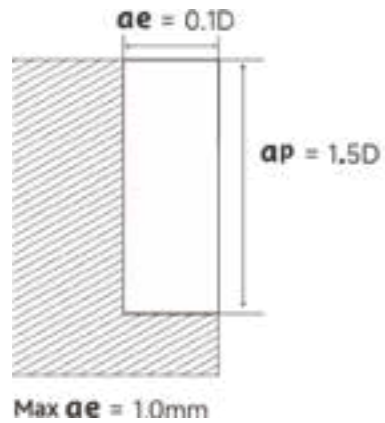
● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재											
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-SGA3/-L/H/G Cutting Parameters 추천절삭조건				
Workpiece Material 피삭재	Aluminum alloy 알루미늄 합금		Silicon aluminum alloy Si=10% 실리콘 알루미늄 합금 Si=10%	
	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
1	40000	800	40000	600
2	40000	1200	40000	900
3	26500	1500	21000	1200
4	20000	1650	16000	1300
5	16000	1750	13000	1300
6	13000	1800	10600	1300
8	10000	1900	8000	1500
10	8000	1950	6500	1500
12	6600	2000	5300	1550
14	5700	2000	4600	1600
16	5000	2000	4000	1600
18	4400	2000	3500	1600
20	4000	2000	3200	1600

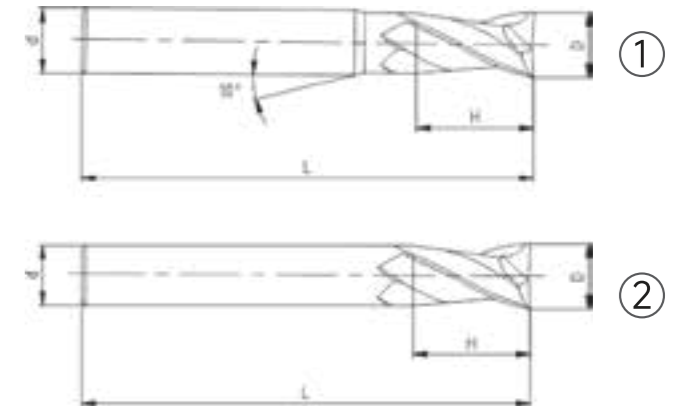
최대 가공 깊이



- ✓ The above table is based on the baseline values for side milling. The cutting conditions for slot milling are based on 70% of the feed speed in the table above.
측면가공시 상기표를 참조하시길 바랍니다. 홈 가공시에 70% 이송으로 사용 바랍니다.
- ✓ Please use machine tools and tool holders with high rigidity and precision. When the machine tool and workpiece are installed with poor rigidity, vibration and abnormal sounds will occur. At this time, the rotating speed and feed recommended in the above table should be reduced.
고강성, 고정밀 장비 사용을 추천합니다.
장비의 강성이 약할 경우 진동이나 소음이 발생하며 이 경우 속도 및 이송을 낮추어 사용하시길 바랍니다.
- ✓ When the cutting depth is small, the Rotating speed and Feed speed can be increased.
절입량이 적을 시 속도 및 이송을 증가 하시길 바랍니다.
- ✓ Please use water-soluble cutting fluid.
수용성 절삭유를 사용하세요.
- ✓ Down milling is recommended for side milling.
측면 가공시 하향 절삭을 추천합니다.
- ✓ Make overhang of tool as short as possible in conditions of non-interference.
가능한 짧은 오버행 공구를 사용하세요.

GA-RAA2

2-Flute Straight Shank Corner Radius End Mills 2날 라디우스 엔드밀



✓ Excellent vibration resistance, can realize various processing of slot milling, side milling, drilling and milling
뛰어난 진동 방지 구조로
측면가공, 홈가공, 드릴링 가공에 최적화



TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
GA-RAA2010-R0.1S	1.0	0.1	4	3	50	2	①	●
GA-RAA2015-R0.2S	1.5	0.2	4	4	50	2	①	●
GA-RAA2020-R0.2S	2.0	0.2	4	6	50	2	①	●
GA-RAA2030-R0.3S	3.0	0.3	4	9	50	2	①	●
GA-RAA2030-R0.5S	3.0	0.5	4	9	50	2	①	●
GA-RAA2040-R0.2S	4.0	0.2	4	10	50	2	②	●
GA-RAA2040-R0.5S	4.0	0.5	4	10	50	2	②	●
GA-RAA2040-R1.0S	4.0	1.0	4	10	50	2	②	●
GA-RAA2050-R0.2	5.0	0.2	6	13	50	2	①	●
GA-RAA2050-R0.3	5.0	0.3	6	13	50	2	①	●
GA-RAA2050-R0.5	5.0	0.5	6	13	50	2	①	●
GA-RAA2050-R1.0	5.0	1.0	6	13	50	2	①	●
GA-RAA2060-R0.5	6.0	0.5	6	16	50	2	②	●
GA-RAA2060-R1.0	6.0	1.0	6	16	50	2	②	●
GA-RAA2060-R2.0	6.0	2.0	6	16	50	2	②	●

TYPE 형번	BASIC DIMENSION 치수 (mm)					NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
GA-RAA2080-R0.5	8.0	0.5	8	20	60	2	②	●
GA-RAA2080-R1.0	8.0	1.0	8	20	60	2	②	●
GA-RAA2080-R2.0	8.0	2.0	4	20	60	2	②	●
GA-RAA2100-R0.5	10.0	0.5	10	25	75	2	②	●
GA-RAA2100-R1.0	10.0	1.0	10	25	75	2	②	●
GA-RAA2100-R2.0	10.0	2.0	10	25	75	2	②	●
GA-RAA2120-R0.5	12.0	0.5	12	30	75	2	②	●
GA-RAA2120-R1.0	12.0	1.0	12	30	75	2	②	●
GA-RAA2120-R2.0	12.0	2.0	12	30	75	2	②	●
GA-RAA2160-R0.5	16.0	0.5	16	36	100	2	②	●
GA-RAA2160-R1.0	16.0	1.0	16	36	100	2	②	●
GA-RAA2160-R2.0	16.0	2.0	16	36	100	2	②	●
GA-RAA2160-R3.0	16.0	3.0	16	36	100	2	②	●
GA-RAA2200-R0.5	20.0	0.5	20	45	100	2	②	●
GA-RAA2200-R1.0	20.0	1.0	20	45	100	2	②	●
GA-RAA2200-R2.0	20.0	2.0	20	45	100	2	②	●
GA-RAA2200-R3.0	20.0	3.0	20	45	100	2	②	●

● Stock Available 재고관리 ▲ Make to order 주문제작

WORKPIECE MATERIAL 피삭재

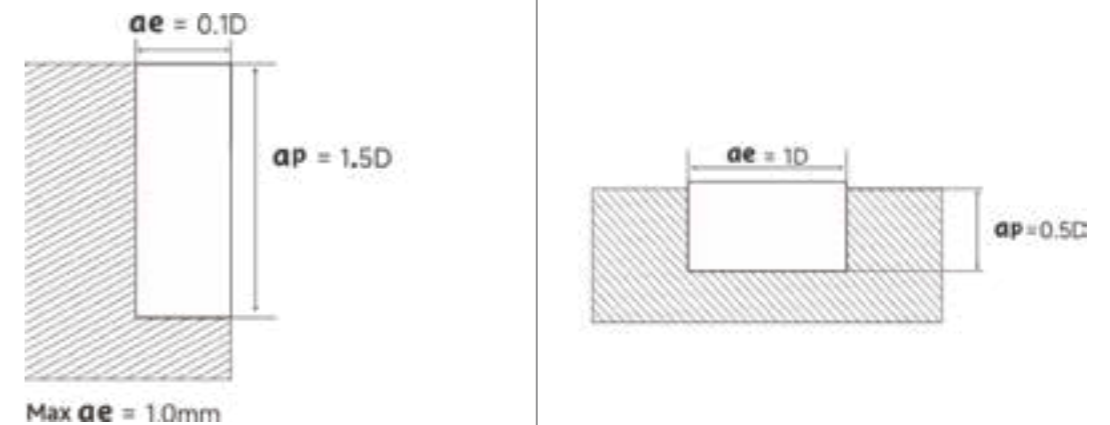
Carbon Steel 탄소강	Alloy Steel 합금강	Pre-hardened steel / Hardened steel 프리하든강 / 고경도강				Stainless Steel 스테인레스강	Cast iron Nodular cast iron 회주철 구상흑연주철	Copper Alloy 동합금	Aluminum Alloy 알루미늄 합금	Titanium Alloy 티타늄 합금	High Temperature Alloy 고온합금강
		~40	~50	~55	~68						

Hardness unit 경도 : HRC ◎ Very Suitable 1차 추천 ○ Suitable 2차 추천

GA-RAA2 Cutting Parameters 추천절삭조건

Workpiece Material 피삭재	Aluminum alloy 알루미늄 합금		Silicon aluminum alloy Si=10% 실리콘 알루미늄 합금 Si=10%	
	Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)
1	40000	650	40000	500
2	40000	950	40000	750
3	26500	1250	21000	1000
4	20000	1400	16000	1100
5	16000	1500	13000	1100
6	13000	1500	10600	1100
8	10000	1600	8000	1250
10	8000	1600	6500	1250
12	6600	1650	5300	1300
14	5700	1700	4600	1350
16	5000	1700	4000	1350
18	4400	1700	3500	1350
20	4000	1700	3200	1350

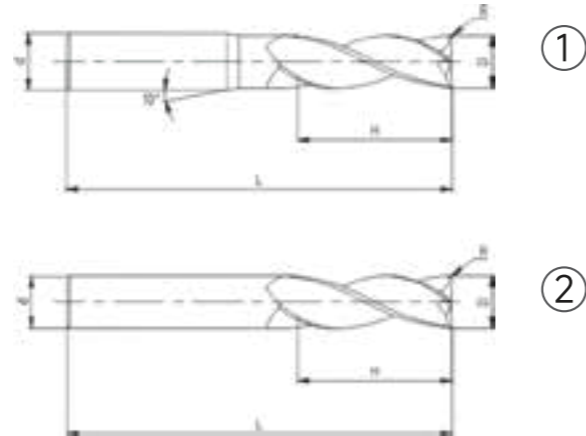
최대 가공 깊이



- ✔ The above table is based on the baseline values for side milling. The cutting conditions for slot milling are based on 70% of the feed speed in the table above.
측면가공시 상기표를 참조하시길 바랍니다. 홈 가공시에 70% 이송으로 사용 바랍니다.
- ✔ Please use machine tools and tool holders with high rigidity and precision. When the machine tool and workpiece are installed with poor rigidity, vibration and abnormal sounds will occur. At this time, the rotating speed and feed recommended in the above table should be reduced.
고강성, 고정밀 장비 사용을 추천합니다.
장비의 강성이 약할 경우 진동이나 소음이 발생하며 이 경우 속도 및 이송을 낮추어 사용하시길 바랍니다.
- ✔ When the cutting depth is small, the Rotating speed and Feed speed can be increased.
절입양이 적을 시 속도 및 이송을 증가 하시길 바랍니다.
- ✔ Please use water-soluble cutting fluid.
수용성 절삭유를 사용하세요.
- ✔ Down milling is recommended for side milling.
측면 가공시 하향 절삭을 추천합니다.
- ✔ Make overhang of tool as short as possible in conditions of non-interference.
가능한 짧은 오버행 공구를 사용하세요.

GA-RAA3 10

3-Flute Straight Shank Corner Radius End Mills 3날 래디우스 엔드밀



✓ Excellent vibration resistance, can realize various processing of slot milling, side milling, drilling and milling
뛰어난 진동 방지 구조로 측면가공, 홈가공, 드릴링 가공에 최적화



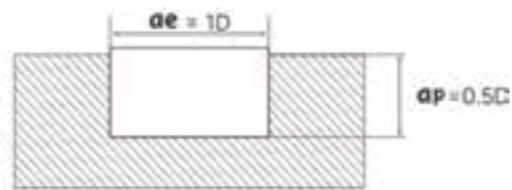
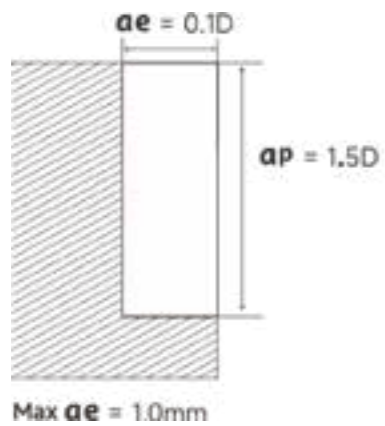
TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
GA-RAA3010-R0.1S	1.0	0.1	4	3	50	3	①	●
GA-RAA3015-R0.2S	1.5	0.2	4	4	50	3	①	●
GA-RAA3020-R0.2S	2.0	0.2	4	6	50	3	①	●
GA-RAA3030-R0.3S	3.0	0.3	4	9	50	3	②	●
GA-RAA3030-R0.5S	3.0	0.5	4	9	50	3	②	●
GA-RAA3040-R0.2S	4.0	0.2	4	10	50	3	②	●
GA-RAA3040-R0.5S	4.0	0.5	4	10	50	3	②	●
GA-RAA3040-R1.0S	4.0	1.0	4	10	50	3	②	●
GA-RAA3050-R0.2	5.0	0.2	6	13	50	3	①	●
GA-RAA3050-R0.5	5.0	0.5	6	13	50	3	①	●
GA-RAA3050-R1.0	5.0	1.0	6	13	50	3	①	●
GA-RAA3060-R0.5	6.0	0.5	6	16	50	3	②	●
GA-RAA3060-R1.0	6.0	1.0	6	16	50	3	②	●
GA-RAA3060-R2.0	6.0	2.0	6	16	50	3	②	●

TYPE 형번	BASIC DIMENSION 치수(mm)					NUMBER OF FLUTE / 날수 Z	GEOMETRY 그림	STOCK 재고
	D	R	d	H	L			
GA-RAA3080-R0.5	8.0	0.5	8	20	60	3	②	●
GA-RAA3080-R1.0	8.0	1.0	8	20	60	3	②	●
GA-RAA3080-R2.0	8.0	2.0	8	20	60	3	②	●
GA-RAA3100-R0.5	10.0	0.5	10	25	75	3	②	●
GA-RAA3100-R1.0	10.0	1.0	10	25	75	3	②	●
GA-RAA3100-R2.0	10.0	2.0	10	25	75	3	②	●
GA-RAA3120-R0.5	12.0	0.5	12	30	75	3	②	●
GA-RAA3120-R1.0	12.0	1.0	12	30	75	3	②	●
GA-RAA3120-R2.0	12.0	2.0	12	30	75	3	②	●
GA-RAA3160-R0.5	16.0	0.5	16	36	100	3	②	●
GA-RAA3160-R1.0	16.0	1.0	16	36	100	3	②	●
GA-RAA3160-R2.0	16.0	2.0	16	36	100	3	②	●
GA-RAA3160-R3.0	16.0	3.0	16	36	100	3	②	●
GA-RAA3200-R0.5	20.0	0.5	20	45	100	3	②	●
GA-RAA3200-R1.0	20.0	1.0	20	45	100	3	②	●
GA-RAA3200-R2.0	20.0	2.0	20	45	100	3	②	●
GA-RAA3200-R3.0	20.0	3.0	20	45	100	3	②	●

GA-RAA3 Cutting Parameters 추천절삭조건

Workpiece Material 파삭재	Aluminum alloy 알루미늄 합금		Silicon aluminum alloy Si=10% 실리콘 알루미늄 합금 Si=10%	
	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
1	40000	800	40000	600
2	40000	1200	40000	900
3	26500	1500	21000	1200
4	20000	1650	16000	1300
5	16000	1750	13000	1300
6	13000	1800	10600	1300
8	10000	1900	8000	1500
10	8000	1950	6500	1500
12	6600	2000	5300	1550
14	5700	2000	4600	1600
16	5000	2000	4000	1600
18	4400	2000	3500	1600
20	4000	2000	3200	1600

최대 가공 깊이



- ✓ The above table is based on the baseline values for side milling. The cutting conditions for slot milling are based on 70% of the feed speed in the table above.
측면가공시 상기표를 참조하시길 바랍니다. 홈 가공시에 70% 이상으로 사용 바랍니다.
- ✓ Please use machine tools and tool holders with high rigidity and precision. When the machine tool and workpiece are installed with poor rigidity, vibration and abnormal sounds will occur. At this time, the rotating speed and feed recommended in the above table should be reduced.
고강성, 고정밀 장비 사용을 추천합니다.
장비의 강성이 약할 경우 진동이나 소음이 발생하며 이 경우 속도 및 이송을 낮추어 사용하시길 바랍니다.
- ✓ When the cutting depth is small, the Rotating speed and Feed speed can be increased.
절입양이 적을 시 속도 및 이송을 증가 하시길 바랍니다.
- ✓ Please use water-soluble cutting fluid.
수용성 절삭유를 사용하세요.
- ✓ Down milling is recommended for side milling.
측면 가공시 하향 절삭을 추천합니다.
- ✓ Make overhang of tool as short as possible in conditions of non-interference.
가능한 짧은 오버행 공구를 사용하세요.

DRILL SERIES FOR HIGH-PERFORMANCE GENERAL MACHINING

고성능 범용 드릴 시리즈

DYNAMIC



Product series

DYNAMIC

Drill Series For High-performance General Machining

고성능 범용 드릴 시리즈

Drill tip cutting edge type 독자적인 절인 현상

The optimized crescent cutting edge enables good hole accuracy and chip handling.

최적화된 절인각으로 뛰어난 칩 배출 및 정밀한 HOLE 구현



New generation of TiSiN Composite coating for general purpose drills

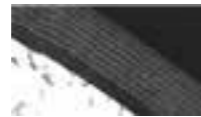
TiSiN 코팅으로 다양한 피삭재에 사용 가능



Excellent composite coating technology 뛰어난 코팅 밀착력

Unique multilayer coating technology, It has excellent wear resistance, heat resistance and solubility resistance.

다층 코팅 박막으로 내마모성 / 내열성 증대



Fluid chip breaker 최적화된 플루트

Adopt new groove shape, reduce cutting resistance and improve drill strength, iron chip processing is excellent, smooth chip removal, strong versatility.

유연한 플루트로 뛰어난 칩 배출 및 드릴 강성 증대

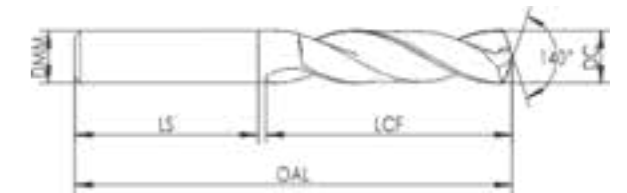
DSD2-N

DSD Series Drills

High Performance General

Machining 3d External Cooling Twist Drill

3D 외부급유 드릴



✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)

DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCF	DMM	LS	OAL	
DSD20300-N	External cooling	3.0	20	4	36	62	●
DSD20310-N	External cooling	3.1	20	4	36	62	●
DSD20320-N	External cooling	3.2	20	4	36	62	●
DSD20330-N	External cooling	3.3	20	4	36	62	●
DSD20340-N	External cooling	3.4	20	4	36	62	●
DSD20350-N	External cooling	3.5	20	4	36	62	●
DSD20360-N	External cooling	3.6	20	4	36	62	●
DSD20370-N	External cooling	3.7	20	4	36	62	●
DSD20380-N	External cooling	3.8	20	4	36	62	●
DSD20390-N	External cooling	3.9	20	4	36	62	●
DSD20400-N	External cooling	4.0	20	4	36	62	●
DSD20300-N	External cooling	3.0	20	6	36	62	●
DSD20310-N	External cooling	3.1	20	6	36	62	●
DSD20320-N	External cooling	3.2	20	6	36	62	●
DSD20330-N	External cooling	3.3	20	6	36	62	●
DSD20340-N	External cooling	3.4	20	6	36	62	●
DSD20350-N	External cooling	3.5	20	6	36	62	●
DSD20360-N	External cooling	3.6	20	6	36	62	●
DSD20370-N	External cooling	3.7	20	6	36	62	●
DSD20380-N	External cooling	3.8	24	6	36	66	●

Application Parts | 절삭평가 사례



Automotive high-pressure fuel rail
자동차 고압 연료 펌프



Automotive engine crank case
자동차 엔진 크랭크 케이스



Flange plate
플랜지 플레이트

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20390-N	External cooling	3.9	24	6	36	66	●
DSD20400-N	External cooling	4.0	24	6	36	66	●
DSD20410-N	External cooling	4.1	24	6	36	66	●
DSD20420-N	External cooling	4.2	24	6	36	66	●
DSD20430-N	External cooling	4.3	24	6	36	66	●
DSD20440-N	External cooling	4.4	24	6	36	66	●
DSD20450-N	External cooling	4.5	24	6	36	66	●
DSD20460-N	External cooling	4.6	24	6	36	66	●
DSD20470-N	External cooling	4.7	24	6	36	66	●
DSD20480-N	External cooling	4.8	28	6	36	66	●
DSD20490-N	External cooling	4.9	28	6	36	66	●
DSD20500-N	External cooling	5.0	28	6	36	66	●
DSD20510-N	External cooling	5.1	28	6	36	66	●
DSD20520-N	External cooling	5.2	28	6	36	66	●
DSD20530-N	External cooling	5.3	28	6	36	66	●
DSD20540-N	External cooling	5.4	28	6	36	66	●
DSD20550-N	External cooling	5.5	28	6	36	66	●
DSD20560-N	External cooling	5.6	28	6	36	66	●
DSD20570-N	External cooling	5.7	28	6	36	66	●
DSD20580-N	External cooling	5.8	28	6	36	66	●
DSD20590-N	External cooling	5.9	28	6	36	66	●
DSD20600-N	External cooling	6.0	28	6	36	66	●
DSD20610-N	External cooling	6.1	34	8	36	79	●
DSD20620-N	External cooling	6.2	34	8	36	79	●
DSD20630-N	External cooling	6.3	34	8	36	79	●
DSD20640-N	External cooling	6.4	34	8	36	79	●
DSD20650-N	External cooling	6.5	34	8	36	79	●
DSD20660-N	External cooling	6.6	34	8	36	79	●
DSD20670-N	External cooling	6.7	34	8	36	79	●
DSD20680-N	External cooling	6.8	34	8	36	79	●
DSD20690-N	External cooling	6.9	34	8	36	79	●
DSD20700-N	External cooling	7.0	34	8	36	79	●
DSD20710-N	External cooling	7.1	41	8	36	79	●
DSD20720-N	External cooling	7.2	41	8	36	79	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20730-N	External cooling	7.3	41	8	36	79	●
DSD20740-N	External cooling	7.4	41	8	36	79	●
DSD20750-N	External cooling	7.5	41	8	36	79	●
DSD20760-N	External cooling	7.6	41	8	36	79	●
DSD20770-N	External cooling	7.7	41	8	36	79	●
DSD20780-N	External cooling	7.8	41	8	36	79	●
DSD20790-N	External cooling	7.9	41	8	36	79	●
DSD20800-N	External cooling	8.0	41	8	36	79	●
DSD20810-N	External cooling	8.1	47	10	40	89	●
DSD20820-N	External cooling	8.2	47	10	40	89	●
DSD20830-N	External cooling	8.3	47	10	40	89	●
DSD20840-N	External cooling	8.4	47	10	40	89	●
DSD20850-N	External cooling	8.5	47	10	40	89	●
DSD20860-N	External cooling	8.6	47	10	40	89	●
DSD20870-N	External cooling	8.7	47	10	40	89	●
DSD20880-N	External cooling	8.8	47	10	40	89	●
DSD20890-N	External cooling	8.9	47	10	40	89	●
DSD20900-N	External cooling	9.0	47	10	40	89	●
DSD20910-N	External cooling	9.1	47	10	40	89	●
DSD20920-N	External cooling	9.2	47	10	40	89	●
DSD20930-N	External cooling	9.3	47	10	40	89	●
DSD20940-N	External cooling	9.4	47	10	40	89	●
DSD20950-N	External cooling	9.5	47	10	40	89	●
DSD20960-N	External cooling	9.6	47	10	40	89	●
DSD20970-N	External cooling	9.7	47	10	40	89	●
DSD20980-N	External cooling	9.8	47	10	40	89	●
DSD20990-N	External cooling	9.9	47	10	40	89	●
DSD21000-N	External cooling	10.0	47	10	40	89	●
DSD21010-N	External cooling	10.1	55	12	45	102	●
DSD21020-N	External cooling	10.2	55	12	45	102	●
DSD21030-N	External cooling	10.3	55	12	45	102	●
DSD21040-N	External cooling	10.4	55	12	45	102	●
DSD21050-N	External cooling	10.5	55	12	45	102	●
DSD21060-N	External cooling	10.6	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21070-N	External cooling	10.7	55	12	45	102	●
DSD21080-N	External cooling	10.8	55	12	45	102	●
DSD21090-N	External cooling	10.9	55	12	45	102	●
DSD21100-N	External cooling	11.0	55	12	45	102	●
DSD21110-N	External cooling	11.1	55	12	45	102	●
DSD21120-N	External cooling	11.2	55	12	45	102	●
DSD21130-N	External cooling	11.3	55	12	45	102	●
DSD21140-N	External cooling	11.4	55	12	45	102	●
DSD21150-N	External cooling	11.5	55	12	45	102	●
DSD21160-N	External cooling	11.6	55	12	45	102	●
DSD21170-N	External cooling	11.7	55	12	45	102	●
DSD21180-N	External cooling	11.8	55	12	45	102	●
DSD21190-N	External cooling	11.9	55	12	45	102	●
DSD21200-N	External cooling	12.0	55	12	45	102	●
DSD21210-N	External cooling	12.1	60	14	45	107	●
DSD21220-N	External cooling	12.2	60	14	45	107	●
DSD21230-N	External cooling	12.3	60	14	45	107	●
DSD21240-N	External cooling	12.4	60	14	45	107	●
DSD21250-N	External cooling	12.5	60	14	45	107	●
DSD21260-N	External cooling	12.6	60	14	45	107	●
DSD21270-N	External cooling	12.7	60	14	45	107	●
DSD21280-N	External cooling	12.8	60	14	45	107	●
DSD21290-N	External cooling	12.9	60	14	45	107	●
DSD21300-N	External cooling	13.0	60	14	45	107	●
DSD21310-N	External cooling	13.1	60	14	45	107	●
DSD21320-N	External cooling	13.2	60	14	45	107	●
DSD21330-N	External cooling	13.3	60	14	45	107	●
DSD21340-N	External cooling	13.4	60	14	45	107	●
DSD21350-N	External cooling	13.5	60	14	45	107	●
DSD21360-N	External cooling	13.6	60	14	45	107	●
DSD21370-N	External cooling	13.7	60	14	45	107	●
DSD21380-N	External cooling	13.8	60	14	45	107	●
DSD21390-N	External cooling	13.9	60	14	45	107	●
DSD21400-N	External cooling	14.0	60	14	45	107	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21410-N	External cooling	14.1	65	16	48	115	●
DSD21420-N	External cooling	14.2	65	16	48	115	●
DSD21430-N	External cooling	14.3	65	16	48	115	●
DSD21440-N	External cooling	14.4	65	16	48	115	●
DSD21450-N	External cooling	14.5	65	16	48	115	●
DSD21460-N	External cooling	14.6	65	16	48	115	●
DSD21470-N	External cooling	14.7	65	16	48	115	●
DSD21480-N	External cooling	14.8	65	16	48	115	●
DSD21490-N	External cooling	14.9	65	16	48	115	●
DSD21500-N	External cooling	15.0	65	16	48	115	●
DSD21510-N	External cooling	15.1	65	16	48	115	●
DSD21520-N	External cooling	15.2	65	16	48	115	●
DSD21530-N	External cooling	15.3	65	16	48	115	●
DSD21540-N	External cooling	15.4	65	16	48	115	●
DSD21550-N	External cooling	15.5	65	16	48	115	●
DSD21560-N	External cooling	15.6	65	16	48	115	●
DSD21570-N	External cooling	15.7	65	16	48	115	●
DSD21580-N	External cooling	15.8	65	16	48	115	●
DSD21590-N	External cooling	15.9	65	16	48	115	●
DSD21600-N	External cooling	16.0	65	16	48	115	●
DSD21610-N	External cooling	16.1	73	18	48	123	●
DSD21620-N	External cooling	16.2	73	18	48	123	●
DSD21630-N	External cooling	16.3	73	18	48	123	●
DSD21640-N	External cooling	16.4	73	18	48	123	●
DSD21650-N	External cooling	16.5	73	18	48	123	●
DSD21660-N	External cooling	16.6	73	18	48	123	●
DSD21670-N	External cooling	16.7	73	18	48	123	●
DSD21680-N	External cooling	16.8	73	18	48	123	●
DSD21690-N	External cooling	16.9	73	18	48	123	●
DSD21700-N	External cooling	17.0	73	18	48	123	●
DSD21710-N	External cooling	17.1	73	18	48	123	●
DSD21720-N	External cooling	17.2	73	18	48	123	●
DSD21730-N	External cooling	17.3	73	18	48	123	●
DSD21740-N	External cooling	17.4	73	18	48	123	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21750-N	External cooling	17.5	73	18	48	123	●
DSD21760-N	External cooling	17.6	73	18	48	123	●
DSD21770-N	External cooling	17.7	73	18	48	123	●
DSD21780-N	External cooling	17.8	73	18	48	123	●
DSD21790-N	External cooling	17.9	73	18	48	123	●
DSD21800-N	External cooling	18.0	73	18	48	123	●
DSD21810-N	External cooling	18.1	79	20	50	131	●
DSD21820-N	External cooling	18.2	79	20	50	131	●
DSD21830-N	External cooling	18.3	79	20	50	131	●
DSD21840-N	External cooling	18.4	79	20	50	131	●
DSD21850-N	External cooling	18.5	79	20	50	131	●
DSD21860-N	External cooling	18.6	79	20	50	131	●
DSD21870-N	External cooling	18.7	79	20	50	131	●
DSD21880-N	External cooling	18.8	79	20	50	131	●
DSD21890-N	External cooling	18.9	79	20	50	131	●
DSD21900-N	External cooling	19.0	79	20	50	131	●
DSD21910-N	External cooling	19.1	79	20	50	131	●
DSD21920-N	External cooling	19.2	79	20	50	131	●
DSD21930-N	External cooling	19.3	79	20	50	131	●
DSD21940-N	External cooling	19.4	79	20	50	131	●
DSD21950-N	External cooling	19.5	79	20	50	131	●
DSD21960-N	External cooling	19.6	79	20	50	131	●
DSD21970-N	External cooling	19.7	79	20	50	131	●
DSD21980-N	External cooling	19.8	79	20	50	131	●
DSD21990-N	External cooling	19.9	79	20	50	131	●
DSD22000-N	External cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

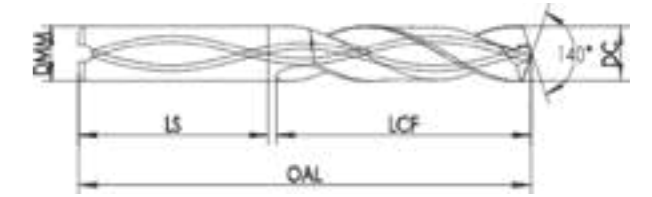
DSD2-C

DSD Series Drills

High Performance General

Machining 3d Internal Cooling Twist Drill

3D 내부급유 드릴



✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)

DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20300-C	Internal cooling	3.0	20	4	36	62	●
DSD20310-C	Internal cooling	3.1	20	4	36	62	●
DSD20320-C	Internal cooling	3.2	20	4	36	62	●
DSD20330-C	Internal cooling	3.3	20	4	36	62	●
DSD20340-C	Internal cooling	3.4	20	4	36	62	●
DSD20350-C	Internal cooling	3.5	20	4	36	62	●
DSD20360-C	Internal cooling	3.6	20	4	36	62	●
DSD20370-C	Internal cooling	3.7	20	4	36	62	●
DSD20380-C	Internal cooling	3.8	20	4	36	62	●
DSD20390-C	Internal cooling	3.9	20	4	36	62	●
DSD20400-C	Internal cooling	4.0	20	4	36	62	●
DSD20300-C	Internal cooling	3.0	20	6	36	62	●
DSD20310-C	Internal cooling	3.1	20	6	36	62	●
DSD20320-C	Internal cooling	3.2	20	6	36	62	●
DSD20330-C	Internal cooling	3.3	20	6	36	62	●
DSD20340-C	Internal cooling	3.4	20	6	36	62	●
DSD20350-C	Internal cooling	3.5	20	6	36	62	●
DSD20360-C	Internal cooling	3.6	20	6	36	62	●
DSD20370-C	Internal cooling	3.7	20	6	36	62	●
DSD20380-C	Internal cooling	3.8	24	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20390-C	Internal cooling	3.9	24	6	36	66	●
DSD20400-C	Internal cooling	4.0	24	6	36	66	●
DSD20410-C	Internal cooling	4.1	24	6	36	66	●
DSD20420-C	Internal cooling	4.2	24	6	36	66	●
DSD20430-C	Internal cooling	4.3	24	6	36	66	●
DSD20440-C	Internal cooling	4.4	24	6	36	66	●
DSD20450-C	Internal cooling	4.5	24	6	36	66	●
DSD20460-C	Internal cooling	4.6	24	6	36	66	●
DSD20470-C	Internal cooling	4.7	24	6	36	66	●
DSD20480-C	Internal cooling	4.8	28	6	36	66	●
DSD20490-C	Internal cooling	4.9	28	6	36	66	●
DSD20500-C	Internal cooling	5.0	28	6	36	66	●
DSD20510-C	Internal cooling	5.1	28	6	36	66	●
DSD20520-C	Internal cooling	5.2	28	6	36	66	●
DSD20530-C	Internal cooling	5.3	28	6	36	66	●
DSD20540-C	Internal cooling	5.4	28	6	36	66	●
DSD20550-C	Internal cooling	5.5	28	6	36	66	●
DSD20560-C	Internal cooling	5.6	28	6	36	66	●
DSD20570-C	Internal cooling	5.7	28	6	36	66	●
DSD20580-C	Internal cooling	5.8	28	6	36	66	●
DSD20590-C	Internal cooling	5.9	28	6	36	66	●
DSD20600-C	Internal cooling	6.0	28	6	36	66	●
DSD20610-C	Internal cooling	6.1	34	8	36	79	●
DSD20620-C	Internal cooling	6.2	34	8	36	79	●
DSD20630-C	Internal cooling	6.3	34	8	36	79	●
DSD20640-C	Internal cooling	6.4	34	8	36	79	●
DSD20650-C	Internal cooling	6.5	34	8	36	79	●
DSD20660-C	Internal cooling	6.6	34	8	36	79	●
DSD20670-C	Internal cooling	6.7	34	8	36	79	●
DSD20680-C	Internal cooling	6.8	34	8	36	79	●
DSD20690-C	Internal cooling	6.9	34	8	36	79	●
DSD20700-C	Internal cooling	7.0	34	8	36	79	●
DSD20710-C	Internal cooling	7.1	41	8	36	79	●
DSD20720-C	Internal cooling	7.2	41	8	36	79	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20730-C	Internal cooling	7.3	41	8	36	79	●
DSD20740-C	Internal cooling	7.4	41	8	36	79	●
DSD20750-C	Internal cooling	7.5	41	8	36	79	●
DSD20760-C	Internal cooling	7.6	41	8	36	79	●
DSD20770-C	Internal cooling	7.7	41	8	36	79	●
DSD20780-C	Internal cooling	7.8	41	8	36	79	●
DSD20790-C	Internal cooling	7.9	41	8	36	79	●
DSD20800-C	Internal cooling	8.0	41	8	36	79	●
DSD20810-C	Internal cooling	8.1	47	10	40	89	●
DSD20820-C	Internal cooling	8.2	47	10	40	89	●
DSD20830-C	Internal cooling	8.3	47	10	40	89	●
DSD20840-C	Internal cooling	8.4	47	10	40	89	●
DSD20850-C	Internal cooling	8.5	47	10	40	89	●
DSD20860-C	Internal cooling	8.6	47	10	40	89	●
DSD20870-C	Internal cooling	8.7	47	10	40	89	●
DSD20880-C	Internal cooling	8.8	47	10	40	89	●
DSD20890-C	Internal cooling	8.9	47	10	40	89	●
DSD20900-C	Internal cooling	9.0	47	10	40	89	●
DSD20910-C	Internal cooling	9.1	47	10	40	89	●
DSD20920-C	Internal cooling	9.2	47	10	40	89	●
DSD20930-C	Internal cooling	9.3	47	10	40	89	●
DSD20940-C	Internal cooling	9.4	47	10	40	89	●
DSD20950-C	Internal cooling	9.5	47	10	40	89	●
DSD20960-C	Internal cooling	9.6	47	10	40	89	●
DSD20970-C	Internal cooling	9.7	47	10	40	89	●
DSD20980-C	Internal cooling	9.8	47	10	40	89	●
DSD20990-C	Internal cooling	9.9	47	10	40	89	●
DSD21000-C	Internal cooling	10.0	47	10	40	89	●
DSD21010-C	Internal cooling	10.1	55	12	45	102	●
DSD21020-C	Internal cooling	10.2	55	12	45	102	●
DSD21030-C	Internal cooling	10.3	55	12	45	102	●
DSD21040-C	Internal cooling	10.4	55	12	45	102	●
DSD21050-C	Internal cooling	10.5	55	12	45	102	●
DSD21060-C	Internal cooling	10.6	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21070-C	Internal cooling	10.7	55	12	45	102	●
DSD21080-C	Internal cooling	10.8	55	12	45	102	●
DSD21090-C	Internal cooling	10.9	55	12	45	102	●
DSD21100-C	Internal cooling	11.0	55	12	45	102	●
DSD21110-C	Internal cooling	11.1	55	12	45	102	●
DSD21120-C	Internal cooling	11.2	55	12	45	102	●
DSD21130-C	Internal cooling	11.3	55	12	45	102	●
DSD21140-C	Internal cooling	11.4	55	12	45	102	●
DSD21150-C	Internal cooling	11.5	55	12	45	102	●
DSD21160-C	Internal cooling	11.6	55	12	45	102	●
DSD21170-C	Internal cooling	11.7	55	12	45	102	●
DSD21180-C	Internal cooling	11.8	55	12	45	102	●
DSD21190-C	Internal cooling	11.9	55	12	45	102	●
DSD21200-C	Internal cooling	12.0	55	12	45	102	●
DSD21210-C	Internal cooling	12.1	60	14	45	107	●
DSD21220-C	Internal cooling	12.2	60	14	45	107	●
DSD21230-C	Internal cooling	12.3	60	14	45	107	●
DSD21240-C	Internal cooling	12.4	60	14	45	107	●
DSD21250-C	Internal cooling	12.5	60	14	45	107	●
DSD21260-C	Internal cooling	12.6	60	14	45	107	●
DSD21270-C	Internal cooling	12.7	60	14	45	107	●
DSD21280-C	Internal cooling	12.8	60	14	45	107	●
DSD21290-C	Internal cooling	12.9	60	14	45	107	●
DSD21300-C	Internal cooling	13.0	60	14	45	107	●
DSD21310-C	Internal cooling	13.1	60	14	45	107	●
DSD21320-C	Internal cooling	13.2	60	14	45	107	●
DSD21330-C	Internal cooling	13.3	60	14	45	107	●
DSD21340-C	Internal cooling	13.4	60	14	45	107	●
DSD21350-C	Internal cooling	13.5	60	14	45	107	●
DSD21360-C	Internal cooling	13.6	60	14	45	107	●
DSD21370-C	Internal cooling	13.7	60	14	45	107	●
DSD21380-C	Internal cooling	13.8	60	14	45	107	●
DSD21390-C	Internal cooling	13.9	60	14	45	107	●
DSD21400-C	Internal cooling	14.0	60	14	45	107	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21410-C	Internal cooling	14.1	65	16	48	115	●
DSD21420-C	Internal cooling	14.2	65	16	48	115	●
DSD21430-C	Internal cooling	14.3	65	16	48	115	●
DSD21440-C	Internal cooling	14.4	65	16	48	115	●
DSD21450-C	Internal cooling	14.5	65	16	48	115	●
DSD21460-C	Internal cooling	14.6	65	16	48	115	●
DSD21470-C	Internal cooling	14.7	65	16	48	115	●
DSD21480-C	Internal cooling	14.8	65	16	48	115	●
DSD21490-C	Internal cooling	14.9	65	16	48	115	●
DSD21500-C	Internal cooling	15.0	65	16	48	115	●
DSD21510-C	Internal cooling	15.1	65	16	48	115	●
DSD21520-C	Internal cooling	15.2	65	16	48	115	●
DSD21530-C	Internal cooling	15.3	65	16	48	115	●
DSD21540-C	Internal cooling	15.4	65	16	48	115	●
DSD21550-C	Internal cooling	15.5	65	16	48	115	●
DSD21560-C	Internal cooling	15.6	65	16	48	115	●
DSD21570-C	Internal cooling	15.7	65	16	48	115	●
DSD21580-C	Internal cooling	15.8	65	16	48	115	●
DSD21590-C	Internal cooling	15.9	65	16	48	115	●
DSD21600-C	Internal cooling	16.0	65	16	48	115	●
DSD21610-C	Internal cooling	16.1	73	18	48	123	●
DSD21620-C	Internal cooling	16.2	73	18	48	123	●
DSD21630-C	Internal cooling	16.3	73	18	48	123	●
DSD21640-C	Internal cooling	16.4	73	18	48	123	●
DSD21650-C	Internal cooling	16.5	73	18	48	123	●
DSD21660-C	Internal cooling	16.6	73	18	48	123	●
DSD21670-C	Internal cooling	16.7	73	18	48	123	●
DSD21680-C	Internal cooling	16.8	73	18	48	123	●
DSD21690-C	Internal cooling	16.9	73	18	48	123	●
DSD21700-C	Internal cooling	17.0	73	18	48	123	●
DSD21710-C	Internal cooling	17.1	73	18	48	123	●
DSD21720-C	Internal cooling	17.2	73	18	48	123	●
DSD21730-C	Internal cooling	17.3	73	18	48	123	●
DSD21740-C	Internal cooling	17.4	73	18	48	123	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21750-C	Internal cooling	17.5	73	18	48	123	●
DSD21760-C	Internal cooling	17.6	73	18	48	123	●
DSD21770-C	Internal cooling	17.7	73	18	48	123	●
DSD21780-C	Internal cooling	17.8	73	18	48	123	●
DSD21790-C	Internal cooling	17.9	73	18	48	123	●
DSD21800-C	Internal cooling	18.0	73	18	48	123	●
DSD21810-C	Internal cooling	18.1	79	20	50	131	●
DSD21820-C	Internal cooling	18.2	79	20	50	131	●
DSD21830-C	Internal cooling	18.3	79	20	50	131	●
DSD21840-C	Internal cooling	18.4	79	20	50	131	●
DSD21850-C	Internal cooling	18.5	79	20	50	131	●
DSD21860-C	Internal cooling	18.6	79	20	50	131	●
DSD21870-C	Internal cooling	18.7	79	20	50	131	●
DSD21880-C	Internal cooling	18.8	79	20	50	131	●
DSD21890-C	Internal cooling	18.9	79	20	50	131	●
DSD21900-C	Internal cooling	19.0	79	20	50	131	●
DSD21910-C	Internal cooling	19.1	79	20	50	131	●
DSD21920-C	Internal cooling	19.2	79	20	50	131	●
DSD21930-C	Internal cooling	19.3	79	20	50	131	●
DSD21940-C	Internal cooling	19.4	79	20	50	131	●
DSD21950-C	Internal cooling	19.5	79	20	50	131	●
DSD21960-C	Internal cooling	19.6	79	20	50	131	●
DSD21970-C	Internal cooling	19.7	79	20	50	131	●
DSD21980-C	Internal cooling	19.8	79	20	50	131	●
DSD21990-C	Internal cooling	19.9	79	20	50	131	●
DSD22000-C	Internal cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

DLD2-N

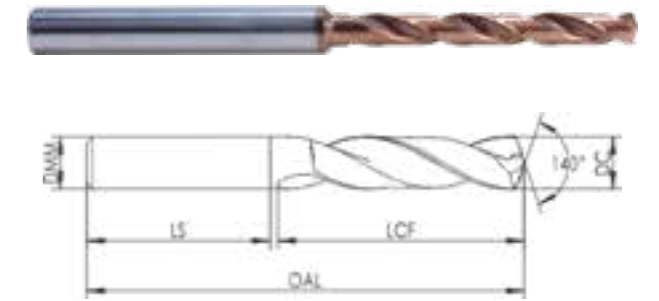
DLD Series Drills

High Performance General

Machining 5d External Cooling Twist Drill

5D 외부급유 드릴

✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)



DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20300-N	External cooling	3.0	20	4	36	62	●
DLD20310-N	External cooling	3.1	20	4	36	62	●
DLD20320-N	External cooling	3.2	20	4	36	62	●
DLD20330-N	External cooling	3.3	20	4	36	62	●
DLD20340-N	External cooling	3.4	20	4	36	62	●
DLD20350-N	External cooling	3.5	20	4	36	62	●
DLD20360-N	External cooling	3.6	20	4	36	62	●
DLD20370-N	External cooling	3.7	20	4	36	62	●
DLD20380-N	External cooling	3.8	20	4	36	62	●
DLD20390-N	External cooling	3.9	20	4	36	62	●
DLD20400-N	External cooling	4.0	20	4	36	62	●
DLD20300-N	External cooling	3.0	20	6	36	62	●
DLD20310-N	External cooling	3.1	20	6	36	62	●
DLD20320-N	External cooling	3.2	20	6	36	62	●
DLD20330-N	External cooling	3.3	20	6	36	62	●
DLD20340-N	External cooling	3.4	20	6	36	62	●
DLD20350-N	External cooling	3.5	20	6	36	62	●
DLD20360-N	External cooling	3.6	20	6	36	62	●
DLD20370-N	External cooling	3.7	20	6	36	62	●
DLD20380-N	External cooling	3.8	24	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20390-N	External cooling	3.9	24	6	36	66	●
DLD20400-N	External cooling	4.0	24	6	36	66	●
DLD20410-N	External cooling	4.1	24	6	36	66	●
DLD20420-N	External cooling	4.2	24	6	36	66	●
DLD20430-N	External cooling	4.3	24	6	36	66	●
DLD20440-N	External cooling	4.4	24	6	36	66	●
DLD20450-N	External cooling	4.5	24	6	36	66	●
DLD20460-N	External cooling	4.6	24	6	36	66	●
DLD20470-N	External cooling	4.7	24	6	36	66	●
DLD20480-N	External cooling	4.8	28	6	36	66	●
DLD20490-N	External cooling	4.9	28	6	36	66	●
DLD20500-N	External cooling	5.0	28	6	36	66	●
DLD20510-N	External cooling	5.1	28	6	36	66	●
DLD20520-N	External cooling	5.2	28	6	36	66	●
DLD20530-N	External cooling	5.3	28	6	36	66	●
DLD20540-N	External cooling	5.4	28	6	36	66	●
DLD20550-N	External cooling	5.5	28	6	36	66	●
DLD20560-N	External cooling	5.6	28	6	36	66	●
DLD20570-N	External cooling	5.7	28	6	36	66	●
DLD20580-N	External cooling	5.8	28	6	36	66	●
DLD20590-N	External cooling	5.9	28	6	36	66	●
DLD20600-N	External cooling	6.0	28	6	36	66	●
DLD20610-N	External cooling	6.1	34	8	36	79	●
DLD20620-N	External cooling	6.2	34	8	36	79	●
DLD20630-N	External cooling	6.3	34	8	36	79	●
DLD20640-N	External cooling	6.4	34	8	36	79	●
DLD20650-N	External cooling	6.5	34	8	36	79	●
DLD20660-N	External cooling	6.6	34	8	36	79	●
DLD20670-N	External cooling	6.7	34	8	36	79	●
DLD20680-N	External cooling	6.8	34	8	36	79	●
DLD20690-N	External cooling	6.9	34	8	36	79	●
DLD20700-N	External cooling	7.0	34	8	36	79	●
DLD20710-N	External cooling	7.1	41	8	36	79	●
DLD20720-N	External cooling	7.2	41	8	36	79	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20730-N	External cooling	7.3	41	8	36	79	●
DLD20740-N	External cooling	7.4	41	8	36	79	●
DLD20750-N	External cooling	7.5	41	8	36	79	●
DLD20760-N	External cooling	7.6	41	8	36	79	●
DLD20770-N	External cooling	7.7	41	8	36	79	●
DLD20780-N	External cooling	7.8	41	8	36	79	●
DLD20790-N	External cooling	7.9	41	8	36	79	●
DLD20800-N	External cooling	8.0	41	8	36	79	●
DLD20810-N	External cooling	8.1	47	10	40	89	●
DLD20820-N	External cooling	8.2	47	10	40	89	●
DLD20830-N	External cooling	8.3	47	10	40	89	●
DLD20840-N	External cooling	8.4	47	10	40	89	●
DLD20850-N	External cooling	8.5	47	10	40	89	●
DLD20860-N	External cooling	8.6	47	10	40	89	●
DLD20870-N	External cooling	8.7	47	10	40	89	●
DLD20880-N	External cooling	8.8	47	10	40	89	●
DLD20890-N	External cooling	8.9	47	10	40	89	●
DLD20900-N	External cooling	9.0	47	10	40	89	●
DLD20910-N	External cooling	9.1	47	10	40	89	●
DLD20920-N	External cooling	9.2	47	10	40	89	●
DLD20930-N	External cooling	9.3	47	10	40	89	●
DLD20940-N	External cooling	9.4	47	10	40	89	●
DLD20950-N	External cooling	9.5	47	10	40	89	●
DLD20960-N	External cooling	9.6	47	10	40	89	●
DLD20970-N	External cooling	9.7	47	10	40	89	●
DLD20980-N	External cooling	9.8	47	10	40	89	●
DLD20990-N	External cooling	9.9	47	10	40	89	●
DLD21000-N	External cooling	10.0	47	10	40	89	●
DLD21010-N	External cooling	10.1	55	12	45	102	●
DLD21020-N	External cooling	10.2	55	12	45	102	●
DLD21030-N	External cooling	10.3	55	12	45	102	●
DLD21040-N	External cooling	10.4	55	12	45	102	●
DLD21050-N	External cooling	10.5	55	12	45	102	●
DLD21060-N	External cooling	10.6	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21070-N	External cooling	10.7	55	12	45	102	●
DLD21080-N	External cooling	10.8	55	12	45	102	●
DLD21090-N	External cooling	10.9	55	12	45	102	●
DLD21100-N	External cooling	11.0	55	12	45	102	●
DLD21110-N	External cooling	11.1	55	12	45	102	●
DLD21120-N	External cooling	11.2	55	12	45	102	●
DLD21130-N	External cooling	11.3	55	12	45	102	●
DLD21140-N	External cooling	11.4	55	12	45	102	●
DLD21150-N	External cooling	11.5	55	12	45	102	●
DLD21160-N	External cooling	11.6	55	12	45	102	●
DLD21170-N	External cooling	11.7	55	12	45	102	●
DLD21180-N	External cooling	11.8	55	12	45	102	●
DLD21190-N	External cooling	11.9	55	12	45	102	●
DLD21200-N	External cooling	12.0	55	12	45	102	●
DLD21210-N	External cooling	12.1	60	14	45	107	●
DLD21220-N	External cooling	12.2	60	14	45	107	●
DLD21230-N	External cooling	12.3	60	14	45	107	●
DLD21240-N	External cooling	12.4	60	14	45	107	●
DLD21250-N	External cooling	12.5	60	14	45	107	●
DLD21260-N	External cooling	12.6	60	14	45	107	●
DLD21270-N	External cooling	12.7	60	14	45	107	●
DLD21280-N	External cooling	12.8	60	14	45	107	●
DLD21290-N	External cooling	12.9	60	14	45	107	●
DLD21300-N	External cooling	13.0	60	14	45	107	●
DLD21310-N	External cooling	13.1	60	14	45	107	●
DLD21320-N	External cooling	13.2	60	14	45	107	●
DLD21330-N	External cooling	13.3	60	14	45	107	●
DLD21340-N	External cooling	13.4	60	14	45	107	●
DLD21350-N	External cooling	13.5	60	14	45	107	●
DLD21360-N	External cooling	13.6	60	14	45	107	●
DLD21370-N	External cooling	13.7	60	14	45	107	●
DLD21380-N	External cooling	13.8	60	14	45	107	●
DLD21390-N	External cooling	13.9	60	14	45	107	●
DLD21400-N	External cooling	14.0	60	14	45	107	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21410-N	External cooling	14.1	65	16	48	115	●
DLD21420-N	External cooling	14.2	65	16	48	115	●
DLD21430-N	External cooling	14.3	65	16	48	115	●
DLD21440-N	External cooling	14.4	65	16	48	115	●
DLD21450-N	External cooling	14.5	65	16	48	115	●
DLD21460-N	External cooling	14.6	65	16	48	115	●
DLD21470-N	External cooling	14.7	65	16	48	115	●
DLD21480-N	External cooling	14.8	65	16	48	115	●
DLD21490-N	External cooling	14.9	65	16	48	115	●
DLD21500-N	External cooling	15.0	65	16	48	115	●
DLD21510-N	External cooling	15.1	65	16	48	115	●
DLD21520-N	External cooling	15.2	65	16	48	115	●
DLD21530-N	External cooling	15.3	65	16	48	115	●
DLD21540-N	External cooling	15.4	65	16	48	115	●
DLD21550-N	External cooling	15.5	65	16	48	115	●
DLD21560-N	External cooling	15.6	65	16	48	115	●
DLD21570-N	External cooling	15.7	65	16	48	115	●
DLD21580-N	External cooling	15.8	65	16	48	115	●
DLD21590-N	External cooling	15.9	65	16	48	115	●
DLD21600-N	External cooling	16.0	65	16	48	115	●
DLD21610-N	External cooling	16.1	73	18	48	123	●
DLD21620-N	External cooling	16.2	73	18	48	123	●
DLD21630-N	External cooling	16.3	73	18	48	123	●
DLD21640-N	External cooling	16.4	73	18	48	123	●
DLD21650-N	External cooling	16.5	73	18	48	123	●
DLD21660-N	External cooling	16.6	73	18	48	123	●
DLD21670-N	External cooling	16.7	73	18	48	123	●
DLD21680-N	External cooling	16.8	73	18	48	123	●
DLD21690-N	External cooling	16.9	73	18	48	123	●
DLD21700-N	External cooling	17.0	73	18	48	123	●
DLD21710-N	External cooling	17.1	73	18	48	123	●
DLD21720-N	External cooling	17.2	73	18	48	123	●
DLD21730-N	External cooling	17.3	73	18	48	123	●
DLD21740-N	External cooling	17.4	73	18	48	123	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21750-N	External cooling	17.5	73	18	48	123	●
DLD21760-N	External cooling	17.6	73	18	48	123	●
DLD21770-N	External cooling	17.7	73	18	48	123	●
DLD21780-N	External cooling	17.8	73	18	48	123	●
DLD21790-N	External cooling	17.9	73	18	48	123	●
DLD21800-N	External cooling	18.0	73	18	48	123	●
DLD21810-N	External cooling	18.1	79	20	50	131	●
DLD21820-N	External cooling	18.2	79	20	50	131	●
DLD21830-N	External cooling	18.3	79	20	50	131	●
DLD21840-N	External cooling	18.4	79	20	50	131	●
DLD21850-N	External cooling	18.5	79	20	50	131	●
DLD21860-N	External cooling	18.6	79	20	50	131	●
DLD21870-N	External cooling	18.7	79	20	50	131	●
DLD21880-N	External cooling	18.8	79	20	50	131	●
DLD21890-N	External cooling	18.9	79	20	50	131	●
DLD21900-N	External cooling	19.0	79	20	50	131	●
DLD21910-N	External cooling	19.1	79	20	50	131	●
DLD21920-N	External cooling	19.2	79	20	50	131	●
DLD21930-N	External cooling	19.3	79	20	50	131	●
DLD21940-N	External cooling	19.4	79	20	50	131	●
DLD21950-N	External cooling	19.5	79	20	50	131	●
DLD21960-N	External cooling	19.6	79	20	50	131	●
DLD21970-N	External cooling	19.7	79	20	50	131	●
DLD21980-N	External cooling	19.8	79	20	50	131	●
DLD21990-N	External cooling	19.9	79	20	50	131	●
DLD22000-N	External cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

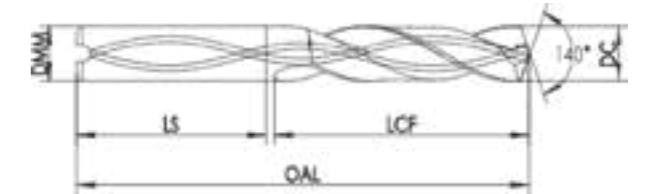
DLD2-C

DLD Series Drills

High Performance General

Machining 5d Internal Cooling Twist Drill

5D 내부급유 드릴



✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)

DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20300-C	Internal cooling	3.0	20	4	36	62	●
DLD20310-C	Internal cooling	3.1	20	4	36	62	●
DLD20320-C	Internal cooling	3.2	20	4	36	62	●
DLD20330-C	Internal cooling	3.3	20	4	36	62	●
DLD20340-C	Internal cooling	3.4	20	4	36	62	●
DLD20350-C	Internal cooling	3.5	20	4	36	62	●
DLD20360-C	Internal cooling	3.6	20	4	36	62	●
DLD20370-C	Internal cooling	3.7	20	4	36	62	●
DLD20380-C	Internal cooling	3.8	20	4	36	62	●
DLD20390-C	Internal cooling	3.9	20	4	36	62	●
DLD20400-C	Internal cooling	4.0	20	4	36	62	●
DLD20300-C	Internal cooling	3.0	20	6	36	62	●
DLD20310-C	Internal cooling	3.1	20	6	36	62	●
DLD20320-C	Internal cooling	3.2	20	6	36	62	●
DLD20330-C	Internal cooling	3.3	20	6	36	62	●
DLD20340-C	Internal cooling	3.4	20	6	36	62	●
DLD20350-C	Internal cooling	3.5	20	6	36	62	●
DLD20360-C	Internal cooling	3.6	20	6	36	62	●
DLD20370-C	Internal cooling	3.7	20	6	36	62	●
DLD20380-C	Internal cooling	3.8	24	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20390-C	Internal cooling	3.9	24	6	36	66	●
DLD20400-C	Internal cooling	4.0	24	6	36	66	●
DLD20410-C	Internal cooling	4.1	24	6	36	66	●
DLD20420-C	Internal cooling	4.2	24	6	36	66	●
DLD20430-C	Internal cooling	4.3	24	6	36	66	●
DLD20440-C	Internal cooling	4.4	24	6	36	66	●
DLD20450-C	Internal cooling	4.5	24	6	36	66	●
DLD20460-C	Internal cooling	4.6	24	6	36	66	●
DLD20470-C	Internal cooling	4.7	24	6	36	66	●
DLD20480-C	Internal cooling	4.8	28	6	36	66	●
DLD20490-C	Internal cooling	4.9	28	6	36	66	●
DLD20500-C	Internal cooling	5.0	28	6	36	66	●
DLD20510-C	Internal cooling	5.1	28	6	36	66	●
DLD20520-C	Internal cooling	5.2	28	6	36	66	●
DLD20530-C	Internal cooling	5.3	28	6	36	66	●
DLD20540-C	Internal cooling	5.4	28	6	36	66	●
DLD20550-C	Internal cooling	5.5	28	6	36	66	●
DLD20560-C	Internal cooling	5.6	28	6	36	66	●
DLD20570-C	Internal cooling	5.7	28	6	36	66	●
DLD20580-C	Internal cooling	5.8	28	6	36	66	●
DLD20590-C	Internal cooling	5.9	28	6	36	66	●
DLD20600-C	Internal cooling	6.0	28	6	36	66	●
DLD20610-C	Internal cooling	6.1	34	8	36	79	●
DLD20620-C	Internal cooling	6.2	34	8	36	79	●
DLD20630-C	Internal cooling	6.3	34	8	36	79	●
DLD20640-C	Internal cooling	6.4	34	8	36	79	●
DLD20650-C	Internal cooling	6.5	34	8	36	79	●
DLD20660-C	Internal cooling	6.6	34	8	36	79	●
DLD20670-C	Internal cooling	6.7	34	8	36	79	●
DLD20680-C	Internal cooling	6.8	34	8	36	79	●
DLD20690-C	Internal cooling	6.9	34	8	36	79	●
DLD20700-C	Internal cooling	7.0	34	8	36	79	●
DLD20710-C	Internal cooling	7.1	41	8	36	79	●
DLD20720-C	Internal cooling	7.2	41	8	36	79	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20730-C	Internal cooling	7.3	41	8	36	79	●
DLD20740-C	Internal cooling	7.4	41	8	36	79	●
DLD20750-C	Internal cooling	7.5	41	8	36	79	●
DLD20760-C	Internal cooling	7.6	41	8	36	79	●
DLD20770-C	Internal cooling	7.7	41	8	36	79	●
DLD20780-C	Internal cooling	7.8	41	8	36	79	●
DLD20790-C	Internal cooling	7.9	41	8	36	79	●
DLD20800-C	Internal cooling	8.0	41	8	36	79	●
DLD20810-C	Internal cooling	8.1	47	10	40	89	●
DLD20820-C	Internal cooling	8.2	47	10	40	89	●
DLD20830-C	Internal cooling	8.3	47	10	40	89	●
DLD20840-C	Internal cooling	8.4	47	10	40	89	●
DLD20850-C	Internal cooling	8.5	47	10	40	89	●
DLD20860-C	Internal cooling	8.6	47	10	40	89	●
DLD20870-C	Internal cooling	8.7	47	10	40	89	●
DLD20880-C	Internal cooling	8.8	47	10	40	89	●
DLD20890-C	Internal cooling	8.9	47	10	40	89	●
DLD20900-C	Internal cooling	9.0	47	10	40	89	●
DLD20910-C	Internal cooling	9.1	47	10	40	89	●
DLD20920-C	Internal cooling	9.2	47	10	40	89	●
DLD20930-C	Internal cooling	9.3	47	10	40	89	●
DLD20940-C	Internal cooling	9.4	47	10	40	89	●
DLD20950-C	Internal cooling	9.5	47	10	40	89	●
DLD20960-C	Internal cooling	9.6	47	10	40	89	●
DLD20970-C	Internal cooling	9.7	47	10	40	89	●
DLD20980-C	Internal cooling	9.8	47	10	40	89	●
DLD20990-C	Internal cooling	9.9	47	10	40	89	●
DLD21000-C	Internal cooling	10.0	47	10	40	89	●
DLD21010-C	Internal cooling	10.1	55	12	45	102	●
DLD21020-C	Internal cooling	10.2	55	12	45	102	●
DLD21030-C	Internal cooling	10.3	55	12	45	102	●
DLD21040-C	Internal cooling	10.4	55	12	45	102	●
DLD21050-C	Internal cooling	10.5	55	12	45	102	●
DLD21060-C	Internal cooling	10.6	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21070-C	Internal cooling	10.7	55	12	45	102	●
DLD21080-C	Internal cooling	10.8	55	12	45	102	●
DLD21090-C	Internal cooling	10.9	55	12	45	102	●
DLD21100-C	Internal cooling	11.0	55	12	45	102	●
DLD21110-C	Internal cooling	11.1	55	12	45	102	●
DLD21120-C	Internal cooling	11.2	55	12	45	102	●
DLD21130-C	Internal cooling	11.3	55	12	45	102	●
DLD21140-C	Internal cooling	11.4	55	12	45	102	●
DLD21150-C	Internal cooling	11.5	55	12	45	102	●
DLD21160-C	Internal cooling	11.6	55	12	45	102	●
DLD21170-C	Internal cooling	11.7	55	12	45	102	●
DLD21180-C	Internal cooling	11.8	55	12	45	102	●
DLD21190-C	Internal cooling	11.9	55	12	45	102	●
DLD21200-C	Internal cooling	12.0	55	12	45	102	●
DLD21210-C	Internal cooling	12.1	60	14	45	107	●
DLD21220-C	Internal cooling	12.2	60	14	45	107	●
DLD21230-C	Internal cooling	12.3	60	14	45	107	●
DLD21240-C	Internal cooling	12.4	60	14	45	107	●
DLD21250-C	Internal cooling	12.5	60	14	45	107	●
DLD21260-C	Internal cooling	12.6	60	14	45	107	●
DLD21270-C	Internal cooling	12.7	60	14	45	107	●
DLD21280-C	Internal cooling	12.8	60	14	45	107	●
DLD21290-C	Internal cooling	12.9	60	14	45	107	●
DLD21300-C	Internal cooling	13.0	60	14	45	107	●
DLD21310-C	Internal cooling	13.1	60	14	45	107	●
DLD21320-C	Internal cooling	13.2	60	14	45	107	●
DLD21330-C	Internal cooling	13.3	60	14	45	107	●
DLD21340-C	Internal cooling	13.4	60	14	45	107	●
DLD21350-C	Internal cooling	13.5	60	14	45	107	●
DLD21360-C	Internal cooling	13.6	60	14	45	107	●
DLD21370-C	Internal cooling	13.7	60	14	45	107	●
DLD21380-C	Internal cooling	13.8	60	14	45	107	●
DLD21390-C	Internal cooling	13.9	60	14	45	107	●
DLD21400-C	Internal cooling	14.0	60	14	45	107	●





TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21410-C	Internal cooling	14.1	65	16	48	115	●
DLD21420-C	Internal cooling	14.2	65	16	48	115	●
DLD21430-C	Internal cooling	14.3	65	16	48	115	●
DLD21440-C	Internal cooling	14.4	65	16	48	115	●
DLD21450-C	Internal cooling	14.5	65	16	48	115	●
DLD21460-C	Internal cooling	14.6	65	16	48	115	●
DLD21470-C	Internal cooling	14.7	65	16	48	115	●
DLD21480-C	Internal cooling	14.8	65	16	48	115	●
DLD21490-C	Internal cooling	14.9	65	16	48	115	●
DLD21500-C	Internal cooling	15.0	65	16	48	115	●
DLD21510-C	Internal cooling	15.1	65	16	48	115	●
DLD21520-C	Internal cooling	15.2	65	16	48	115	●
DLD21530-C	Internal cooling	15.3	65	16	48	115	●
DLD21540-C	Internal cooling	15.4	65	16	48	115	●
DLD21550-C	Internal cooling	15.5	65	16	48	115	●
DLD21560-C	Internal cooling	15.6	65	16	48	115	●
DLD21570-C	Internal cooling	15.7	65	16	48	115	●
DLD21580-C	Internal cooling	15.8	65	16	48	115	●
DLD21590-C	Internal cooling	15.9	65	16	48	115	●
DLD21600-C	Internal cooling	16.0	65	16	48	115	●
DLD21610-C	Internal cooling	16.1	73	18	48	123	●
DLD21620-C	Internal cooling	16.2	73	18	48	123	●
DLD21630-C	Internal cooling	16.3	73	18	48	123	●
DLD21640-C	Internal cooling	16.4	73	18	48	123	●
DLD21650-C	Internal cooling	16.5	73	18	48	123	●
DLD21660-C	Internal cooling	16.6	73	18	48	123	●
DLD21670-C	Internal cooling	16.7	73	18	48	123	●
DLD21680-C	Internal cooling	16.8	73	18	48	123	●
DLD21690-C	Internal cooling	16.9	73	18	48	123	●
DLD21700-C	Internal cooling	17.0	73	18	48	123	●
DLD21710-C	Internal cooling	17.1	73	18	48	123	●
DLD21720-C	Internal cooling	17.2	73	18	48	123	●
DLD21730-C	Internal cooling	17.3	73	18	48	123	●
DLD21740-C	Internal cooling	17.4	73	18	48	123	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21750-C	Internal cooling	17.5	73	18	48	123	●
DLD21760-C	Internal cooling	17.6	73	18	48	123	●
DLD21770-C	Internal cooling	17.7	73	18	48	123	●
DLD21780-C	Internal cooling	17.8	73	18	48	123	●
DLD21790-C	Internal cooling	17.9	73	18	48	123	●
DLD21800-C	Internal cooling	18.0	73	18	48	123	●
DLD21810-C	Internal cooling	18.1	79	20	50	131	●
DLD21820-C	Internal cooling	18.2	79	20	50	131	●
DLD21830-C	Internal cooling	18.3	79	20	50	131	●
DLD21840-C	Internal cooling	18.4	79	20	50	131	●
DLD21850-C	Internal cooling	18.5	79	20	50	131	●
DLD21860-C	Internal cooling	18.6	79	20	50	131	●
DLD21870-C	Internal cooling	18.7	79	20	50	131	●
DLD21880-C	Internal cooling	18.8	79	20	50	131	●
DLD21890-C	Internal cooling	18.9	79	20	50	131	●
DLD21900-C	Internal cooling	19.0	79	20	50	131	●
DLD21910-C	Internal cooling	19.1	79	20	50	131	●
DLD21920-C	Internal cooling	19.2	79	20	50	131	●
DLD21930-C	Internal cooling	19.3	79	20	50	131	●
DLD21940-C	Internal cooling	19.4	79	20	50	131	●
DLD21950-C	Internal cooling	19.5	79	20	50	131	●
DLD21960-C	Internal cooling	19.6	79	20	50	131	●
DLD21970-C	Internal cooling	19.7	79	20	50	131	●
DLD21980-C	Internal cooling	19.8	79	20	50	131	●
DLD21990-C	Internal cooling	19.9	79	20	50	131	●
DLD22000-C	Internal cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

DYNAMIC General Drill Parameter Recommendation Table (External cooling) 드릴 적용 추천표 (외부급유)

Workpiece Material 피삭재	Soft steel 연강 HB≤180		Carbon steel/alloy steel 탄소강 / 합금강 ~30HRC		Pre-hardened steel 프리하든강 ~40HRC		Cast iron 회주철		The nodular cast iron 구상흑연주철	
	60~120m/min		60~120m/min		40~70m/min		60~120m/min		50~100m/min	
Cutting speed 절삭속도	60~120m/min		60~120m/min		40~70m/min		60~120m/min		50~100m/min	
Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
3	9500	0.09~0.12	9500	0.09~0.12	6300	0.09~0.12	9500	0.09~0.12	7400	0.09~0.12
4	7000	0.10~0.15	7000	0.10~0.15	4700	0.10~0.15	7000	0.10~0.15	5600	0.10~0.15
5	5700	0.12~0.18	5700	0.12~0.18	3800	0.12~0.18	5700	0.12~0.18	4500	0.12~0.18
6	4700	0.14~0.20	4700	0.14~0.20	3100	0.14~0.20	4700	0.14~0.20	3700	0.14~0.20
8	3600	0.16~0.24	3600	0.16~0.24	2400	0.16~0.24	3600	0.16~0.24	2800	0.16~0.24
10	2800	0.18~0.27	2800	0.18~0.27	1900	0.18~0.27	2800	0.18~0.27	2200	0.18~0.27
12	2400	0.20~0.30	2400	0.20~0.30	1600	0.20~0.30	2400	0.20~0.30	1900	0.20~0.30
14	2100	0.22~0.35	2100	0.22~0.35	1400	0.22~0.35	2100	0.22~0.35	1600	0.22~0.35
16	1800	0.25~0.36	1800	0.25~0.36	1200	0.25~0.36	1800	0.25~0.36	1400	0.25~0.36
18	1600	0.28~0.38	1600	0.28~0.38	1100	0.28~0.38	1600	0.28~0.38	1200	0.28~0.38
20	1400	0.30~0.40	1400	0.30~0.40	950	0.30~0.40	1400	0.30~0.40	1100	0.30~0.40

-  When using the tool for the first time, test cutting according to the above cutting speed of 90% or Feed speed of 85%. When the cutting condition is stable, the cutting speed and feed rate are increased one by one.
 초기 사용시 상기조건에서 절삭 속도 90%, 테이블 이송 85%로 조정하여 사용하세요.
 이후 안정화 되었을때 상기조건으로 진행하시면 됩니다.
-  This standard cutting conditions table is suitable for water-soluble cutting fluids.
 상기 절삭 조건표는 수용성 절삭유를 사용하는 조건의 추천표입니다.
-  When installing the drill, use a clean chuck without defects and keep the radial runout of the drill within 0.02mm.
 흠집이 없는 깨끗한 척을 사용하고, 드릴의 반경 방향 흔들림을 0.02mm 이내로 유지하십시오.
-  The cutting conditions of this table are suitable for occasions with hole depth below 5D.
 상기 표는 5D 깊이 홀에 적합합니다.

DYNAMIC General Drill Parameter Recommendation Table (Internal cooling) 드릴 적용 추천표 (내부급유)										
Workpiece Material 피삭재	Soft steel 연 강 HB≤180		Carbon steel/alloy steel 탄소강 / 합금강 ~30HRC		Pre-hardened steel 프리하든강 ~40HRC		Cast iron 회주철		The nodular cast iron 구상흑연주철	
Cutting speed 절삭속도	60~120m/min		60~120m/min		40~70m/min		60~120m/min		50~100m/min	
Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
3	12700	0.09~0.12	12700	0.09~0.12	7400	0.09~0.12	12700	0.09~0.12	9500	0.09~0.12
4	9600	0.10~0.15	9600	0.10~0.15	5600	0.10~0.15	9600	0.10~0.15	7000	0.10~0.15
5	7600	0.12~0.18	7600	0.12~0.18	4500	0.12~0.18	7600	0.12~0.18	5700	0.12~0.18
6	6400	0.14~0.20	6400	0.14~0.20	3700	0.14~0.20	6400	0.14~0.20	4700	0.14~0.20
8	4800	0.16~0.24	4800	0.16~0.24	2800	0.16~0.24	4800	0.16~0.24	3600	0.16~0.24
10	3800	0.18~0.27	3800	0.18~0.27	2200	0.18~0.27	3800	0.18~0.27	2800	0.18~0.27
12	3200	0.20~0.30	3200	0.20~0.30	1900	0.20~0.30	3200	0.20~0.30	2400	0.20~0.30
14	2700	0.22~0.35	2700	0.22~0.35	1600	0.22~0.35	2700	0.22~0.35	2100	0.22~0.35
16	2400	0.25~0.36	2400	0.25~0.36	1400	0.25~0.36	2400	0.25~0.36	1800	0.25~0.36
18	2100	0.28~0.38	2100	0.28~0.38	1200	0.28~0.38	2100	0.28~0.38	1600	0.28~0.38
20	1900	0.30~0.40	1900	0.30~0.40	1100	0.30~0.40	1900	0.30~0.40	1400	0.30~0.40

- When using the tool for the first time, test cutting according to the above cutting speed of 90% or Feed speed of 85%. When the cutting condition is stable, the cutting speed and feed rate are increased one by one.
초기 사용시 상기조건에서 절삭 속도 90%, 테이블 이송 85%로 조정하여 사용하세요.
이후 안정화 되었을때 상기조건으로 진행하시면 됩니다.
- This standard cutting conditions table is suitable for water-soluble cutting fluids.
상기 절삭 조건표는 수용성 절삭유를 사용하는 조건의 추천표입니다.
- When installing the drill, use a clean chuck without defects and keep the radial runout of the drill within 0.02mm.
흠집이 없는 깨끗한 척을 사용하고, 드릴의 반경 방향 흔들림을 0.02mm 이내로 유지하십시오.
- The cutting conditions of this table are suitable for occasions with hole depth below 5D.
상기 표는 5D 깊이 홀에 적합합니다.

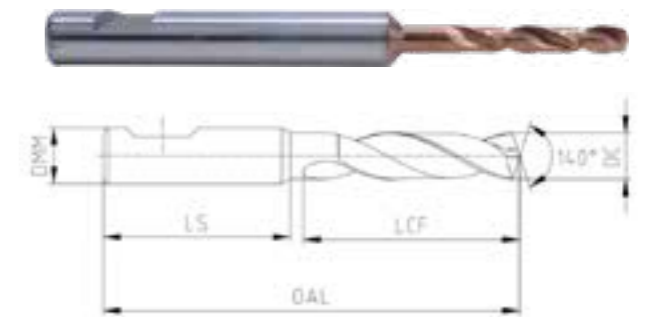
DSD2-N-DIN

DSD Series Drills [DIN6535-HB]

High Performance General

Machining 3d External Cooling Twist Drill

3D 외부급유 드릴 [DIN6535-HB]



- Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)
- DIN 6535-HB Handle 핸들

DC tolerance m7 Shank tolerance h6
드릴 직경 공차 샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCF	DMM	LS	OAL	
DSD20300-N-DIN	External cooling	3.0	20	6	36	62	●
DSD20310-N-DIN	External cooling	3.1	20	6	36	62	●
DSD20320-N-DIN	External cooling	3.2	20	6	36	62	●
DSD20330-N-DIN	External cooling	3.3	20	6	36	62	●
DSD20340-N-DIN	External cooling	3.4	20	6	36	62	●
DSD20350-N-DIN	External cooling	3.5	20	6	36	62	●
DSD20360-N-DIN	External cooling	3.6	20	6	36	62	●
DSD20370-N-DIN	External cooling	3.7	20	6	36	62	●
DSD20380-N-DIN	External cooling	3.8	24	6	36	66	●
DSD20390-N-DIN	External cooling	3.9	24	6	36	66	●
DSD20400-N-DIN	External cooling	4.0	24	6	36	66	●
DSD20410-N-DIN	External cooling	4.1	24	6	36	66	●
DSD20420-N-DIN	External cooling	4.2	24	6	36	66	●
DSD20430-N-DIN	External cooling	4.3	24	6	36	66	●
DSD20440-N-DIN	External cooling	4.4	24	6	36	66	●
DSD20450-N-DIN	External cooling	4.5	24	6	36	66	●
DSD20460-N-DIN	External cooling	4.6	24	6	36	66	●
DSD20470-N-DIN	External cooling	4.7	24	6	36	66	●
DSD20480-N-DIN	External cooling	4.8	28	6	36	66	●
DSD20490-N-DIN	External cooling	4.9	28	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20500-N-DIN	External cooling	5.0	28	6	36	66	●
DSD20510-N-DIN	External cooling	5.1	28	6	36	66	●
DSD20520-N-DIN	External cooling	5.2	28	6	36	66	●
DSD20530-N-DIN	External cooling	5.3	28	6	36	66	●
DSD20540-N-DIN	External cooling	5.4	28	6	36	66	●
DSD20550-N-DIN	External cooling	5.5	28	6	36	66	●
DSD20560-N-DIN	External cooling	5.6	28	6	36	66	●
DSD20570-N-DIN	External cooling	5.7	28	6	36	66	●
DSD20580-N-DIN	External cooling	5.8	28	6	36	66	●
DSD20590-N-DIN	External cooling	5.9	28	6	36	66	●
DSD20600-N-DIN	External cooling	6.0	28	6	36	66	●
DSD20610-N-DIN	External cooling	6.1	34	8	36	79	●
DSD20620-N-DIN	External cooling	6.2	34	8	36	79	●
DSD20630-N-DIN	External cooling	6.3	34	8	36	79	●
DSD20640-N-DIN	External cooling	6.4	34	8	36	79	●
DSD20650-N-DIN	External cooling	6.5	34	8	36	79	●
DSD20660-N-DIN	External cooling	6.6	34	8	36	79	●
DSD20670-N-DIN	External cooling	6.7	34	8	36	79	●
DSD20680-N-DIN	External cooling	6.8	34	8	36	79	●
DSD20690-N-DIN	External cooling	6.9	34	8	36	79	●
DSD20700-N-DIN	External cooling	7.0	34	8	36	79	●
DSD20710-N-DIN	External cooling	7.1	41	8	36	79	●
DSD20720-N-DIN	External cooling	7.2	41	8	36	79	●
DSD20730-N-DIN	External cooling	7.3	41	8	36	79	●
DSD20740-N-DIN	External cooling	7.4	41	8	36	79	●
DSD20750-N-DIN	External cooling	7.5	41	8	36	79	●
DSD20760-N-DIN	External cooling	7.6	41	8	36	79	●
DSD20770-N-DIN	External cooling	7.7	41	8	36	79	●
DSD20780-N-DIN	External cooling	7.8	41	8	36	79	●
DSD20790-N-DIN	External cooling	7.9	41	8	36	79	●
DSD20800-N-DIN	External cooling	8.0	41	8	36	79	●
DSD20810-N-DIN	External cooling	8.1	47	10	40	89	●
DSD20820-N-DIN	External cooling	8.2	47	10	40	89	●
DSD20830-N-DIN	External cooling	8.3	47	10	40	89	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20840-N-DIN	External cooling	8.4	47	10	40	89	●
DSD20850-N-DIN	External cooling	8.5	47	10	40	89	●
DSD20860-N-DIN	External cooling	8.6	47	10	40	89	●
DSD20870-N-DIN	External cooling	8.7	47	10	40	89	●
DSD20880-N-DIN	External cooling	8.8	47	10	40	89	●
DSD20890-N-DIN	External cooling	8.9	47	10	40	89	●
DSD20900-N-DIN	External cooling	9.0	47	10	40	89	●
DSD20910-N-DIN	External cooling	9.1	47	10	40	89	●
DSD20920-N-DIN	External cooling	9.2	47	10	40	89	●
DSD20930-N-DIN	External cooling	9.3	47	10	40	89	●
DSD20940-N-DIN	External cooling	9.4	47	10	40	89	●
DSD20950-N-DIN	External cooling	9.5	47	10	40	89	●
DSD20960-N-DIN	External cooling	9.6	47	10	40	89	●
DSD20970-N-DIN	External cooling	9.7	47	10	40	89	●
DSD20980-N-DIN	External cooling	9.8	47	10	40	89	●
DSD20990-N-DIN	External cooling	9.9	47	10	40	89	●
DSD21000-N-DIN	External cooling	10.0	47	10	40	89	●
DSD21010-N-DIN	External cooling	10.1	55	12	45	102	●
DSD21020-N-DIN	External cooling	10.2	55	12	45	102	●
DSD21030-N-DIN	External cooling	10.3	55	12	45	102	●
DSD21040-N-DIN	External cooling	10.4	55	12	45	102	●
DSD21050-N-DIN	External cooling	10.5	55	12	45	102	●
DSD21060-N-DIN	External cooling	10.6	55	12	45	102	●
DSD21070-N-DIN	External cooling	10.7	55	12	45	102	●
DSD21080-N-DIN	External cooling	10.8	55	12	45	102	●
DSD21090-N-DIN	External cooling	10.9	55	12	45	102	●
DSD21100-N-DIN	External cooling	11.0	55	12	45	102	●
DSD21110-N-DIN	External cooling	11.1	55	12	45	102	●
DSD21120-N-DIN	External cooling	11.2	55	12	45	102	●
DSD21130-N-DIN	External cooling	11.3	55	12	45	102	●
DSD21140-N-DIN	External cooling	11.4	55	12	45	102	●
DSD21150-N-DIN	External cooling	11.5	55	12	45	102	●
DSD21160-N-DIN	External cooling	11.6	55	12	45	102	●
DSD21170-N-DIN	External cooling	11.7	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21180-N-DIN	External cooling	11.8	55	12	45	102	●
DSD21190-N-DIN	External cooling	11.9	55	12	45	102	●
DSD21200-N-DIN	External cooling	12	55	12	45	102	●
DSD21210-N-DIN	External cooling	12.1	60	14	45	107	●
DSD21220-N-DIN	External cooling	12.2	60	14	45	107	●
DSD21230-N-DIN	External cooling	12.3	60	14	45	107	●
DSD21240-N-DIN	External cooling	12.4	60	14	45	107	●
DSD21250-N-DIN	External cooling	12.5	60	14	45	107	●
DSD21260-N-DIN	External cooling	12.6	60	14	45	107	●
DSD21270-N-DIN	External cooling	12.7	60	14	45	107	●
DSD21280-N-DIN	External cooling	12.8	60	14	45	107	●
DSD21290-N-DIN	External cooling	12.9	60	14	45	107	●
DSD21300-N-DIN	External cooling	13.0	60	14	45	107	●
DSD21310-N-DIN	External cooling	13.1	60	14	45	107	●
DSD21320-N-DIN	External cooling	13.2	60	14	45	107	●
DSD21330-N-DIN	External cooling	13.3	60	14	45	107	●
DSD21340-N-DIN	External cooling	13.4	60	14	45	107	●
DSD21350-N-DIN	External cooling	13.5	60	14	45	107	●
DSD21360-N-DIN	External cooling	13.6	60	14	45	107	●
DSD21370-N-DIN	External cooling	13.7	60	14	45	107	●
DSD21380-N-DIN	External cooling	13.8	60	14	45	107	●
DSD21390-N-DIN	External cooling	13.9	60	14	45	107	●
DSD21400-N-DIN	External cooling	14.0	60	14	45	107	●
DSD21410-N-DIN	External cooling	14.1	65	16	48	115	●
DSD21420-N-DIN	External cooling	14.2	65	16	48	115	●
DSD21430-N-DIN	External cooling	14.3	65	16	48	115	●
DSD21440-N-DIN	External cooling	14.4	65	16	48	115	●
DSD21450-N-DIN	External cooling	14.5	65	16	48	115	●
DSD21460-N-DIN	External cooling	14.6	65	16	48	115	●
DSD21470-N-DIN	External cooling	14.7	65	16	48	115	●
DSD21480-N-DIN	External cooling	14.8	65	16	48	115	●
DSD21490-N-DIN	External cooling	14.9	65	16	48	115	●
DSD21500-N-DIN	External cooling	15.0	65	16	48	115	●
DSD21510-N-DIN	External cooling	15.1	65	16	48	115	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21520-N-DIN	External cooling	15.2	65	16	48	115	●
DSD21530-N-DIN	External cooling	15.3	65	16	48	115	●
DSD21540-N-DIN	External cooling	15.4	65	16	48	115	●
DSD21550-N-DIN	External cooling	15.5	65	16	48	115	●
DSD21560-N-DIN	External cooling	15.6	65	16	48	115	●
DSD21570-N-DIN	External cooling	15.7	65	16	48	115	●
DSD21580-N-DIN	External cooling	15.8	65	16	48	115	●
DSD21590-N-DIN	External cooling	15.9	65	16	48	115	●
DSD21600-N-DIN	External cooling	16.0	65	16	48	115	●
DSD21610-N-DIN	External cooling	16.1	73	18	48	123	●
DSD21620-N-DIN	External cooling	16.2	73	18	48	123	●
DSD21630-N-DIN	External cooling	16.3	73	18	48	123	●
DSD21640-N-DIN	External cooling	16.4	73	18	48	123	●
DSD21650-N-DIN	External cooling	16.5	73	18	48	123	●
DSD21660-N-DIN	External cooling	16.6	73	18	48	123	●
DSD21670-N-DIN	External cooling	16.7	73	18	48	123	●
DSD21680-N-DIN	External cooling	16.8	73	18	48	123	●
DSD21690-N-DIN	External cooling	16.9	73	18	48	123	●
DSD21700-N-DIN	External cooling	17.0	73	18	48	123	●
DSD21710-N-DIN	External cooling	17.1	73	18	48	123	●
DSD21720-N-DIN	External cooling	17.2	73	18	48	123	●
DSD21730-N-DIN	External cooling	17.3	73	18	48	123	●
DSD21740-N-DIN	External cooling	17.4	73	18	48	123	●
DSD21750-N-DIN	External cooling	17.5	73	18	48	123	●
DSD21760-N-DIN	External cooling	17.6	73	18	48	123	●
DSD21770-N-DIN	External cooling	17.7	73	18	48	123	●
DSD21780-N-DIN	External cooling	17.8	73	18	48	123	●
DSD21790-N-DIN	External cooling	17.9	73	18	48	123	●
DSD21800-N-DIN	External cooling	18.0	73	18	48	123	●
DSD21810-N-DIN	External cooling	18.1	79	20	50	131	●
DSD21820-N-DIN	External cooling	18.2	79	20	50	131	●
DSD21830-N-DIN	External cooling	18.3	79	20	50	131	●
DSD21840-N-DIN	External cooling	18.4	79	20	50	131	●
DSD21850-N-DIN	External cooling	18.5	79	20	50	131	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21860-N-DIN	External cooling	18.6	79	20	50	131	●
DSD21870-N-DIN	External cooling	18.7	79	20	50	131	●
DSD21880-N-DIN	External cooling	18.8	79	20	50	131	●
DSD21890-N-DIN	External cooling	18.9	79	20	50	131	●
DSD21900-N-DIN	External cooling	19.0	79	20	50	131	●
DSD21910-N-DIN	External cooling	19.1	79	20	50	131	●
DSD21920-N-DIN	External cooling	19.2	79	20	50	131	●
DSD21930-N-DIN	External cooling	19.3	79	20	50	131	●
DSD21940-N-DIN	External cooling	19.4	79	20	50	131	●
DSD21950-N-DIN	External cooling	19.5	79	20	50	131	●
DSD21960-N-DIN	External cooling	19.6	79	20	50	131	●
DSD21970-N-DIN	External cooling	19.7	79	20	50	131	●
DSD21980-N-DIN	External cooling	19.8	79	20	50	131	●
DSD21990-N-DIN	External cooling	19.9	79	20	50	131	●
DSD22000-N-DIN	External cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

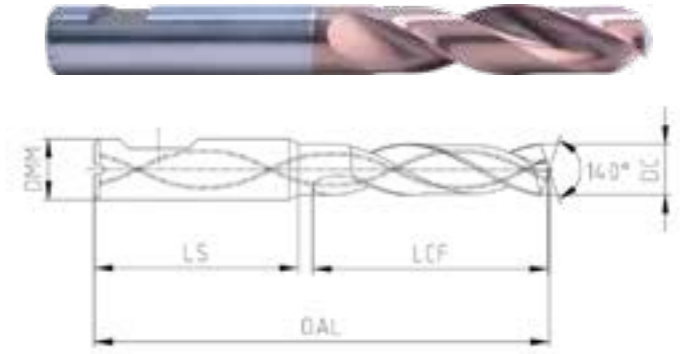
DSD2-C-DIN

DSD Series Drills [DIN6535-HB]

High Performance General

Machining 3d Internal Cooling Twist Drill

3D 내부급유 드릴 [DIN6535-HB]



- ✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)

- ✓ DIN 6535-HB Handle 핸들

DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20300-C-DIN	Internal cooling	3.0	20	6	36	62	●
DSD20310-C-DIN	Internal cooling	3.1	20	6	36	62	●
DSD20320-C-DIN	Internal cooling	3.2	20	6	36	62	●
DSD20330-C-DIN	Internal cooling	3.3	20	6	36	62	●
DSD20340-C-DIN	Internal cooling	3.4	20	6	36	62	●
DSD20350-C-DIN	Internal cooling	3.5	20	6	36	62	●
DSD20360-C-DIN	Internal cooling	3.6	20	6	36	62	●
DSD20370-C-DIN	Internal cooling	3.7	20	6	36	62	●
DSD20380-C-DIN	Internal cooling	3.8	24	6	36	66	●
DSD20390-C-DIN	Internal cooling	3.9	24	6	36	66	●
DSD20400-C-DIN	Internal cooling	4.0	24	6	36	66	●
DSD20410-C-DIN	Internal cooling	4.1	24	6	36	66	●
DSD20420-C-DIN	Internal cooling	4.2	24	6	36	66	●
DSD20430-C-DIN	Internal cooling	4.3	24	6	36	66	●
DSD20440-C-DIN	Internal cooling	4.4	24	6	36	66	●
DSD20450-C-DIN	Internal cooling	4.5	24	6	36	66	●
DSD20460-C-DIN	Internal cooling	4.6	24	6	36	66	●
DSD20470-C-DIN	Internal cooling	4.7	24	6	36	66	●
DSD20480-C-DIN	Internal cooling	4.8	28	6	36	66	●
DSD20490-C-DIN	Internal cooling	4.9	28	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20500-C-DIN	Internal cooling	5.0	28	6	36	66	●
DSD20510-C-DIN	Internal cooling	5.1	28	6	36	66	●
DSD20520-C-DIN	Internal cooling	5.2	28	6	36	66	●
DSD20530-C-DIN	Internal cooling	5.3	28	6	36	66	●
DSD20540-C-DIN	Internal cooling	5.4	28	6	36	66	●
DSD20550-C-DIN	Internal cooling	5.5	28	6	36	66	●
DSD20560-C-DIN	Internal cooling	5.6	28	6	36	66	●
DSD20570-C-DIN	Internal cooling	5.7	28	6	36	66	●
DSD20580-C-DIN	Internal cooling	5.8	28	6	36	66	●
DSD20590-C-DIN	Internal cooling	5.9	28	6	36	66	●
DSD20600-C-DIN	Internal cooling	6.0	28	6	36	66	●
DSD20610-C-DIN	Internal cooling	6.1	34	8	36	79	●
DSD20620-C-DIN	Internal cooling	6.2	34	8	36	79	●
DSD20630-C-DIN	Internal cooling	6.3	34	8	36	79	●
DSD20640-C-DIN	Internal cooling	6.4	34	8	36	79	●
DSD20650-C-DIN	Internal cooling	6.5	34	8	36	79	●
DSD20660-C-DIN	Internal cooling	6.6	34	8	36	79	●
DSD20670-C-DIN	Internal cooling	6.7	34	8	36	79	●
DSD20680-C-DIN	Internal cooling	6.8	34	8	36	79	●
DSD20690-C-DIN	Internal cooling	6.9	34	8	36	79	●
DSD20700-C-DIN	Internal cooling	7.0	34	8	36	79	●
DSD20710-C-DIN	Internal cooling	7.1	41	8	36	79	●
DSD20720-C-DIN	Internal cooling	7.2	41	8	36	79	●
DSD20730-C-DIN	Internal cooling	7.3	41	8	36	79	●
DSD20740-C-DIN	Internal cooling	7.4	41	8	36	79	●
DSD20750-C-DIN	Internal cooling	7.5	41	8	36	79	●
DSD20760-C-DIN	Internal cooling	7.6	41	8	36	79	●
DSD20770-C-DIN	Internal cooling	7.7	41	8	36	79	●
DSD20780-C-DIN	Internal cooling	7.8	41	8	36	79	●
DSD20790-C-DIN	Internal cooling	7.9	41	8	36	79	●
DSD20800-C-DIN	Internal cooling	8.0	41	8	36	79	●
DSD20810-C-DIN	Internal cooling	8.1	47	10	40	89	●
DSD20820-C-DIN	Internal cooling	8.2	47	10	40	89	●
DSD20830-C-DIN	Internal cooling	8.3	47	10	40	89	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD20840-C-DIN	Internal cooling	8.4	47	10	40	89	●
DSD20850-C-DIN	Internal cooling	8.5	47	10	40	89	●
DSD20860-C-DIN	Internal cooling	8.6	47	10	40	89	●
DSD20870-C-DIN	Internal cooling	8.7	47	10	40	89	●
DSD20880-C-DIN	Internal cooling	8.8	47	10	40	89	●
DSD20890-C-DIN	Internal cooling	8.9	47	10	40	89	●
DSD20900-C-DIN	Internal cooling	9.0	47	10	40	89	●
DSD20910-C-DIN	Internal cooling	9.1	47	10	40	89	●
DSD20920-C-DIN	Internal cooling	9.2	47	10	40	89	●
DSD20930-C-DIN	Internal cooling	9.3	47	10	40	89	●
DSD20940-C-DIN	Internal cooling	9.4	47	10	40	89	●
DSD20950-C-DIN	Internal cooling	9.5	47	10	40	89	●
DSD20960-C-DIN	Internal cooling	9.6	47	10	40	89	●
DSD20970-C-DIN	Internal cooling	9.7	47	10	40	89	●
DSD20980-C-DIN	Internal cooling	9.8	47	10	40	89	●
DSD20990-C-DIN	Internal cooling	9.9	47	10	40	89	●
DSD21000-C-DIN	Internal cooling	10.0	47	10	40	89	●
DSD21010-C-DIN	Internal cooling	10.1	55	12	45	102	●
DSD21020-C-DIN	Internal cooling	10.2	55	12	45	102	●
DSD21030-C-DIN	Internal cooling	10.3	55	12	45	102	●
DSD21040-C-DIN	Internal cooling	10.4	55	12	45	102	●
DSD21050-C-DIN	Internal cooling	10.5	55	12	45	102	●
DSD21060-C-DIN	Internal cooling	10.6	55	12	45	102	●
DSD21070-C-DIN	Internal cooling	10.7	55	12	45	102	●
DSD21080-C-DIN	Internal cooling	10.8	55	12	45	102	●
DSD21090-C-DIN	Internal cooling	10.9	55	12	45	102	●
DSD21100-C-DIN	Internal cooling	11.0	55	12	45	102	●
DSD21110-C-DIN	Internal cooling	11.1	55	12	45	102	●
DSD21120-C-DIN	Internal cooling	11.2	55	12	45	102	●
DSD21130-C-DIN	Internal cooling	11.3	55	12	45	102	●
DSD21140-C-DIN	Internal cooling	11.4	55	12	45	102	●
DSD21150-C-DIN	Internal cooling	11.5	55	12	45	102	●
DSD21160-C-DIN	Internal cooling	11.6	55	12	45	102	●
DSD21170-C-DIN	Internal cooling	11.7	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21180-C-DIN	Internal cooling	11.8	55	12	45	102	●
DSD21190-C-DIN	Internal cooling	11.9	55	12	45	102	●
DSD21200-C-DIN	Internal cooling	12.0	55	12	45	102	●
DSD21210-C-DIN	Internal cooling	12.1	60	14	45	107	●
DSD21220-C-DIN	Internal cooling	12.2	60	14	45	107	●
DSD21230-C-DIN	Internal cooling	12.3	60	14	45	107	●
DSD21240-C-DIN	Internal cooling	12.4	60	14	45	107	●
DSD21250-C-DIN	Internal cooling	12.5	60	14	45	107	●
DSD21260-C-DIN	Internal cooling	12.6	60	14	45	107	●
DSD21270-C-DIN	Internal cooling	12.7	60	14	45	107	●
DSD21280-C-DIN	Internal cooling	12.8	60	14	45	107	●
DSD21290-C-DIN	Internal cooling	12.9	60	14	45	107	●
DSD21300-C-DIN	Internal cooling	13.0	60	14	45	107	●
DSD21310-C-DIN	Internal cooling	13.1	60	14	45	107	●
DSD21320-C-DIN	Internal cooling	13.2	60	14	45	107	●
DSD21330-C-DIN	Internal cooling	13.3	60	14	45	107	●
DSD21340-C-DIN	Internal cooling	13.4	60	14	45	107	●
DSD21350-C-DIN	Internal cooling	13.5	60	14	45	107	●
DSD21360-C-DIN	Internal cooling	13.6	60	14	45	107	●
DSD21370-C-DIN	Internal cooling	13.7	60	14	45	107	●
DSD21380-C-DIN	Internal cooling	13.8	60	14	45	107	●
DSD21390-C-DIN	Internal cooling	13.9	60	14	45	107	●
DSD21400-C-DIN	Internal cooling	14.0	60	14	45	107	●
DSD21410-C-DIN	Internal cooling	14.1	65	16	48	115	●
DSD21420-C-DIN	Internal cooling	14.2	65	16	48	115	●
DSD21430-C-DIN	Internal cooling	14.3	65	16	48	115	●
DSD21440-C-DIN	Internal cooling	14.4	65	16	48	115	●
DSD21450-C-DIN	Internal cooling	14.5	65	16	48	115	●
DSD21460-C-DIN	Internal cooling	14.6	65	16	48	115	●
DSD21470-C-DIN	Internal cooling	14.7	65	16	48	115	●
DSD21480-C-DIN	Internal cooling	14.8	65	16	48	115	●
DSD21490-C-DIN	Internal cooling	14.9	65	16	48	115	●
DSD21500-C-DIN	Internal cooling	15.0	65	16	48	115	●
DSD21510-C-DIN	Internal cooling	15.1	65	16	48	115	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21520-C-DIN	Internal cooling	15.2	65	16	48	115	●
DSD21530-C-DIN	Internal cooling	15.3	65	16	48	115	●
DSD21540-C-DIN	Internal cooling	15.4	65	16	48	115	●
DSD21550-C-DIN	Internal cooling	15.5	65	16	48	115	●
DSD21560-C-DIN	Internal cooling	15.6	65	16	48	115	●
DSD21570-C-DIN	Internal cooling	15.7	65	16	48	115	●
DSD21580-C-DIN	Internal cooling	15.8	65	16	48	115	●
DSD21590-C-DIN	Internal cooling	15.9	65	16	48	115	●
DSD21600-C-DIN	Internal cooling	16.0	65	16	48	115	●
DSD21610-C-DIN	Internal cooling	16.1	73	18	48	123	●
DSD21620-C-DIN	Internal cooling	16.2	73	18	48	123	●
DSD21630-C-DIN	Internal cooling	16.3	73	18	48	123	●
DSD21640-C-DIN	Internal cooling	16.4	73	18	48	123	●
DSD21650-C-DIN	Internal cooling	16.5	73	18	48	123	●
DSD21660-C-DIN	Internal cooling	16.6	73	18	48	123	●
DSD21670-C-DIN	Internal cooling	16.7	73	18	48	123	●
DSD21680-C-DIN	Internal cooling	16.8	73	18	48	123	●
DSD21690-C-DIN	Internal cooling	16.9	73	18	48	123	●
DSD21700-C-DIN	Internal cooling	17.0	73	18	48	123	●
DSD21710-C-DIN	Internal cooling	17.1	73	18	48	123	●
DSD21720-C-DIN	Internal cooling	17.2	73	18	48	123	●
DSD21730-C-DIN	Internal cooling	17.3	73	18	48	123	●
DSD21740-C-DIN	Internal cooling	17.4	73	18	48	123	●
DSD21750-C-DIN	Internal cooling	17.5	73	18	48	123	●
DSD21760-C-DIN	Internal cooling	17.6	73	18	48	123	●
DSD21770-C-DIN	Internal cooling	17.7	73	18	48	123	●
DSD21780-C-DIN	Internal cooling	17.8	73	18	48	123	●
DSD21790-C-DIN	Internal cooling	17.9	73	18	48	123	●
DSD21800-C-DIN	Internal cooling	18.0	73	18	48	123	●
DSD21810-C-DIN	Internal cooling	18.1	79	20	50	131	●
DSD21820-C-DIN	Internal cooling	18.2	79	20	50	131	●
DSD21830-C-DIN	Internal cooling	18.3	79	20	50	131	●
DSD21840-C-DIN	Internal cooling	18.4	79	20	50	131	●
DSD21850-C-DIN	Internal cooling	18.5	79	20	50	131	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DSD21860-C-DIN	Internal cooling	18.6	79	20	50	131	●
DSD21870-C-DIN	Internal cooling	18.7	79	20	50	131	●
DSD21880-C-DIN	Internal cooling	18.8	79	20	50	131	●
DSD21890-C-DIN	Internal cooling	18.9	79	20	50	131	●
DSD21900-C-DIN	Internal cooling	19.0	79	20	50	131	●
DSD21910-C-DIN	Internal cooling	19.1	79	20	50	131	●
DSD21920-C-DIN	Internal cooling	19.2	79	20	50	131	●
DSD21930-C-DIN	Internal cooling	19.3	79	20	50	131	●
DSD21940-C-DIN	Internal cooling	19.4	79	20	50	131	●
DSD21950-C-DIN	Internal cooling	19.5	79	20	50	131	●
DSD21960-C-DIN	Internal cooling	19.6	79	20	50	131	●
DSD21970-C-DIN	Internal cooling	19.7	79	20	50	131	●
DSD21980-C-DIN	Internal cooling	19.8	79	20	50	131	●
DSD21990-C-DIN	Internal cooling	19.9	79	20	50	131	●
DSD22000-C-DIN	Internal cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

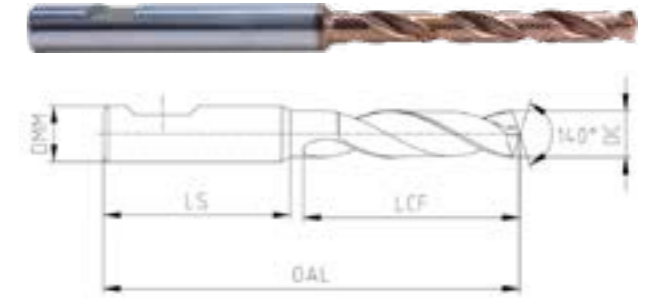
DLD2-N-DIN

DLD Series Drills [DIN6535-HB]

High Performance General

Machining 5d External Cooling Twist Drill

5D 외부급유 드릴 [DIN6535-HB]



- ✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하든강 (≤40HRC)
- ✓ DIN 6535-HB Handle 핸들

DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20300-N-DIN	External cooling	3.0	20	6	36	62	●
DLD20310-N-DIN	External cooling	3.1	20	6	36	62	●
DLD20320-N-DIN	External cooling	3.2	20	6	36	62	●
DLD20330-N-DIN	External cooling	3.3	20	6	36	62	●
DLD20340-N-DIN	External cooling	3.4	20	6	36	62	●
DLD20350-N-DIN	External cooling	3.5	20	6	36	62	●
DLD20360-N-DIN	External cooling	3.6	20	6	36	62	●
DLD20370-N-DIN	External cooling	3.7	20	6	36	62	●
DLD20380-N-DIN	External cooling	3.8	24	6	36	66	●
DLD20390-N-DIN	External cooling	3.9	24	6	36	66	●
DLD20400-N-DIN	External cooling	4.0	24	6	36	66	●
DLD20410-N-DIN	External cooling	4.1	24	6	36	66	●
DLD20420-N-DIN	External cooling	4.2	24	6	36	66	●
DLD20430-N-DIN	External cooling	4.3	24	6	36	66	●
DLD20440-N-DIN	External cooling	4.4	24	6	36	66	●
DLD20450-N-DIN	External cooling	4.5	24	6	36	66	●
DLD20460-N-DIN	External cooling	4.6	24	6	36	66	●
DLD20470-N-DIN	External cooling	4.7	24	6	36	66	●
DLD20480-N-DIN	External cooling	4.8	28	6	36	66	●
DLD20490-N-DIN	External cooling	4.9	28	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20500-N-DIN	External cooling	5.0	28	6	36	66	●
DLD20510-N-DIN	External cooling	5.1	28	6	36	66	●
DLD20520-N-DIN	External cooling	5.2	28	6	36	66	●
DLD20530-N-DIN	External cooling	5.3	28	6	36	66	●
DLD20540-N-DIN	External cooling	5.4	28	6	36	66	●
DLD20550-N-DIN	External cooling	5.5	28	6	36	66	●
DLD20560-N-DIN	External cooling	5.6	28	6	36	66	●
DLD20570-N-DIN	External cooling	5.7	28	6	36	66	●
DLD20580-N-DIN	External cooling	5.8	28	6	36	66	●
DLD20590-N-DIN	External cooling	5.9	28	6	36	66	●
DLD20600-N-DIN	External cooling	6.0	28	6	36	66	●
DLD20610-N-DIN	External cooling	6.1	34	8	36	79	●
DLD20620-N-DIN	External cooling	6.2	34	8	36	79	●
DLD20630-N-DIN	External cooling	6.3	34	8	36	79	●
DLD20640-N-DIN	External cooling	6.4	34	8	36	79	●
DLD20650-N-DIN	External cooling	6.5	34	8	36	79	●
DLD20660-N-DIN	External cooling	6.6	34	8	36	79	●
DLD20670-N-DIN	External cooling	6.7	34	8	36	79	●
DLD20680-N-DIN	External cooling	6.8	34	8	36	79	●
DLD20690-N-DIN	External cooling	6.9	34	8	36	79	●
DLD20700-N-DIN	External cooling	7.0	34	8	36	79	●
DLD20710-N-DIN	External cooling	7.1	41	8	36	79	●
DLD20720-N-DIN	External cooling	7.2	41	8	36	79	●
DLD20730-N-DIN	External cooling	7.3	41	8	36	79	●
DLD20740-N-DIN	External cooling	7.4	41	8	36	79	●
DLD20750-N-DIN	External cooling	7.5	41	8	36	79	●
DLD20760-N-DIN	External cooling	7.6	41	8	36	79	●
DLD20770-N-DIN	External cooling	7.7	41	8	36	79	●
DLD20780-N-DIN	External cooling	7.8	41	8	36	79	●
DLD20790-N-DIN	External cooling	7.9	41	8	36	79	●
DLD20800-N-DIN	External cooling	8.0	41	8	36	79	●
DLD20810-N-DIN	External cooling	8.1	47	10	40	89	●
DLD20820-N-DIN	External cooling	8.2	47	10	40	89	●
DLD20830-N-DIN	External cooling	8.3	47	10	40	89	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20840-N-DIN	External cooling	8.4	47	10	40	89	●
DLD20850-N-DIN	External cooling	8.5	47	10	40	89	●
DLD20860-N-DIN	External cooling	8.6	47	10	40	89	●
DLD20870-N-DIN	External cooling	8.7	47	10	40	89	●
DLD20880-N-DIN	External cooling	8.8	47	10	40	89	●
DLD20890-N-DIN	External cooling	8.9	47	10	40	89	●
DLD20900-N-DIN	External cooling	9.0	47	10	40	89	●
DLD20910-N-DIN	External cooling	9.1	47	10	40	89	●
DLD20920-N-DIN	External cooling	9.2	47	10	40	89	●
DLD20930-N-DIN	External cooling	9.3	47	10	40	89	●
DLD20940-N-DIN	External cooling	9.4	47	10	40	89	●
DLD20950-N-DIN	External cooling	9.5	47	10	40	89	●
DLD20960-N-DIN	External cooling	9.6	47	10	40	89	●
DLD20970-N-DIN	External cooling	9.7	47	10	40	89	●
DLD20980-N-DIN	External cooling	9.8	47	10	40	89	●
DLD20990-N-DIN	External cooling	9.9	47	10	40	89	●
DLD21000-N-DIN	External cooling	10.0	47	10	40	89	●
DLD21010-N-DIN	External cooling	10.1	55	12	45	102	●
DLD21020-N-DIN	External cooling	10.2	55	12	45	102	●
DLD21030-N-DIN	External cooling	10.3	55	12	45	102	●
DLD21040-N-DIN	External cooling	10.4	55	12	45	102	●
DLD21050-N-DIN	External cooling	10.5	55	12	45	102	●
DLD21060-N-DIN	External cooling	10.6	55	12	45	102	●
DLD21070-N-DIN	External cooling	10.7	55	12	45	102	●
DLD21080-N-DIN	External cooling	10.8	55	12	45	102	●
DLD21090-N-DIN	External cooling	10.9	55	12	45	102	●
DLD21100-N-DIN	External cooling	11.0	55	12	45	102	●
DLD21110-N-DIN	External cooling	11.1	55	12	45	102	●
DLD21120-N-DIN	External cooling	11.2	55	12	45	102	●
DLD21130-N-DIN	External cooling	11.3	55	12	45	102	●
DLD21140-N-DIN	External cooling	11.4	55	12	45	102	●
DLD21150-N-DIN	External cooling	11.5	55	12	45	102	●
DLD21160-N-DIN	External cooling	11.6	55	12	45	102	●
DLD21170-N-DIN	External cooling	11.7	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21180-N-DIN	External cooling	11.8	55	12	45	102	●
DLD21190-N-DIN	External cooling	11.9	55	12	45	102	●
DLD21200-N-DIN	External cooling	12.0	55	12	45	102	●
DLD21210-N-DIN	External cooling	12.1	60	14	45	107	●
DLD21220-N-DIN	External cooling	12.2	60	14	45	107	●
DLD21230-N-DIN	External cooling	12.3	60	14	45	107	●
DLD21240-N-DIN	External cooling	12.4	60	14	45	107	●
DLD21250-N-DIN	External cooling	12.5	60	14	45	107	●
DLD21260-N-DIN	External cooling	12.6	60	14	45	107	●
DLD21270-N-DIN	External cooling	12.7	60	14	45	107	●
DLD21280-N-DIN	External cooling	12.8	60	14	45	107	●
DLD21290-N-DIN	External cooling	12.9	60	14	45	107	●
DLD21300-N-DIN	External cooling	13.0	60	14	45	107	●
DLD21310-N-DIN	External cooling	13.1	60	14	45	107	●
DLD21320-N-DIN	External cooling	13.2	60	14	45	107	●
DLD21330-N-DIN	External cooling	13.3	60	14	45	107	●
DLD21340-N-DIN	External cooling	13.4	60	14	45	107	●
DLD21350-N-DIN	External cooling	13.5	60	14	45	107	●
DLD21360-N-DIN	External cooling	13.6	60	14	45	107	●
DLD21370-N-DIN	External cooling	13.7	60	14	45	107	●
DLD21380-N-DIN	External cooling	13.8	60	14	45	107	●
DLD21390-N-DIN	External cooling	13.9	60	14	45	107	●
DLD21400-N-DIN	External cooling	14.0	60	14	45	107	●
DLD21410-N-DIN	External cooling	14.1	65	16	48	115	●
DLD21420-N-DIN	External cooling	14.2	65	16	48	115	●
DLD21430-N-DIN	External cooling	14.3	65	16	48	115	●
DLD21440-N-DIN	External cooling	14.4	65	16	48	115	●
DLD21450-N-DIN	External cooling	14.5	65	16	48	115	●
DLD21460-N-DIN	External cooling	14.6	65	16	48	115	●
DLD21470-N-DIN	External cooling	14.7	65	16	48	115	●
DLD21480-N-DIN	External cooling	14.8	65	16	48	115	●
DLD21490-N-DIN	External cooling	14.9	65	16	48	115	●
DLD21500-N-DIN	External cooling	15.0	65	16	48	115	●
DLD21510-N-DIN	External cooling	15.1	65	16	48	115	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21520-N-DIN	External cooling	15.2	65	16	48	115	●
DLD21530-N-DIN	External cooling	15.3	65	16	48	115	●
DLD21540-N-DIN	External cooling	15.4	65	16	48	115	●
DLD21550-N-DIN	External cooling	15.5	65	16	48	115	●
DLD21560-N-DIN	External cooling	15.6	65	16	48	115	●
DLD21570-N-DIN	External cooling	15.7	65	16	48	115	●
DLD21580-N-DIN	External cooling	15.8	65	16	48	115	●
DLD21590-N-DIN	External cooling	15.9	65	16	48	115	●
DLD21600-N-DIN	External cooling	16.0	65	16	48	115	●
DLD21610-N-DIN	External cooling	16.1	73	18	48	123	●
DLD21620-N-DIN	External cooling	16.2	73	18	48	123	●
DLD21630-N-DIN	External cooling	16.3	73	18	48	123	●
DLD21640-N-DIN	External cooling	16.4	73	18	48	123	●
DLD21650-N-DIN	External cooling	16.5	73	18	48	123	●
DLD21660-N-DIN	External cooling	16.6	73	18	48	123	●
DLD21670-N-DIN	External cooling	16.7	73	18	48	123	●
DLD21680-N-DIN	External cooling	16.8	73	18	48	123	●
DLD21690-N-DIN	External cooling	16.9	73	18	48	123	●
DLD21700-N-DIN	External cooling	17.0	73	18	48	123	●
DLD21710-N-DIN	External cooling	17.1	73	18	48	123	●
DLD21720-N-DIN	External cooling	17.2	73	18	48	123	●
DLD21730-N-DIN	External cooling	17.3	73	18	48	123	●
DLD21740-N-DIN	External cooling	17.4	73	18	48	123	●
DLD21750-N-DIN	External cooling	17.5	73	18	48	123	●
DLD21760-N-DIN	External cooling	17.6	73	18	48	123	●
DLD21770-N-DIN	External cooling	17.7	73	18	48	123	●
DLD21780-N-DIN	External cooling	17.8	73	18	48	123	●
DLD21790-N-DIN	External cooling	17.9	73	18	48	123	●
DLD21800-N-DIN	External cooling	18.0	73	18	48	123	●
DLD21810-N-DIN	External cooling	18.1	79	20	50	131	●
DLD21820-N-DIN	External cooling	18.2	79	20	50	131	●
DLD21830-N-DIN	External cooling	18.3	79	20	50	131	●
DLD21840-N-DIN	External cooling	18.4	79	20	50	131	●
DLD21850-N-DIN	External cooling	18.5	79	20	50	131	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21860-N-DIN	External cooling	18.6	79	20	50	131	●
DLD21870-N-DIN	External cooling	18.7	79	20	50	131	●
DLD21880-N-DIN	External cooling	18.8	79	20	50	131	●
DLD21890-N-DIN	External cooling	18.9	79	20	50	131	●
DLD21900-N-DIN	External cooling	19.0	79	20	50	131	●
DLD21910-N-DIN	External cooling	19.1	79	20	50	131	●
DLD21920-N-DIN	External cooling	19.2	79	20	50	131	●
DLD21930-N-DIN	External cooling	19.3	79	20	50	131	●
DLD21940-N-DIN	External cooling	19.4	79	20	50	131	●
DLD21950-N-DIN	External cooling	19.5	79	20	50	131	●
DLD21960-N-DIN	External cooling	19.6	79	20	50	131	●
DLD21970-N-DIN	External cooling	19.7	79	20	50	131	●
DLD21980-N-DIN	External cooling	19.8	79	20	50	131	●
DLD21990-N-DIN	External cooling	19.9	79	20	50	131	●
DLD22000-N-DIN	External cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

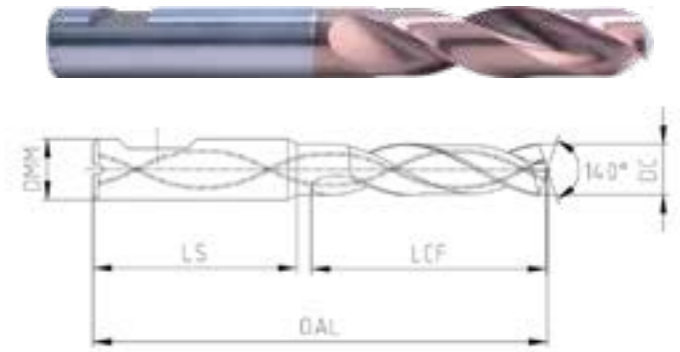
DLD2-C-DIN

DLD Series Drills [DIN6535-HB]

High Performance General

Machining 5d Internal Cooling Twist Drill

5D 내부급유 드릴 [DIN6535-HB]



- ✓ Carbon steel, alloy steel, cast iron, pre-hardened steel (≤40HRC)
탄소강, 합금강, 회주철, 프리하드강 (≤40HRC)
- ✓ DIN 6535-HB Handle 핸들

DC tolerance m7
드릴 직경 공차

Shank tolerance h6
샤프트 공차



TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20300-C-DIN	Internal cooling	3.0	20	6	36	62	●
DLD20310-C-DIN	Internal cooling	3.1	20	6	36	62	●
DLD20320-C-DIN	Internal cooling	3.2	20	6	36	62	●
DLD20330-C-DIN	Internal cooling	3.3	20	6	36	62	●
DLD20340-C-DIN	Internal cooling	3.4	20	6	36	62	●
DLD20350-C-DIN	Internal cooling	3.5	20	6	36	62	●
DLD20360-C-DIN	Internal cooling	3.6	20	6	36	62	●
DLD20370-C-DIN	Internal cooling	3.7	20	6	36	62	●
DLD20380-C-DIN	Internal cooling	3.8	24	6	36	66	●
DLD20390-C-DIN	Internal cooling	3.9	24	6	36	66	●
DLD20400-C-DIN	Internal cooling	4.0	24	6	36	66	●
DLD20410-C-DIN	Internal cooling	4.1	24	6	36	66	●
DLD20420-C-DIN	Internal cooling	4.2	24	6	36	66	●
DLD20430-C-DIN	Internal cooling	4.3	24	6	36	66	●
DLD20440-C-DIN	Internal cooling	4.4	24	6	36	66	●
DLD20450-C-DIN	Internal cooling	4.5	24	6	36	66	●
DLD20460-C-DIN	Internal cooling	4.6	24	6	36	66	●
DLD20470-C-DIN	Internal cooling	4.7	24	6	36	66	●
DLD20480-C-DIN	Internal cooling	4.8	28	6	36	66	●
DLD20490-C-DIN	Internal cooling	4.9	28	6	36	66	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20500-C-DIN	Internal cooling	5.0	28	6	36	66	●
DLD20510-C-DIN	Internal cooling	5.1	28	6	36	66	●
DLD20520-C-DIN	Internal cooling	5.2	28	6	36	66	●
DLD20530-C-DIN	Internal cooling	5.3	28	6	36	66	●
DLD20540-C-DIN	Internal cooling	5.4	28	6	36	66	●
DLD20550-C-DIN	Internal cooling	5.5	28	6	36	66	●
DLD20560-C-DIN	Internal cooling	5.6	28	6	36	66	●
DLD20570-C-DIN	Internal cooling	5.7	28	6	36	66	●
DLD20580-C-DIN	Internal cooling	5.8	28	6	36	66	●
DLD20590-C-DIN	Internal cooling	5.9	28	6	36	66	●
DLD20600-C-DIN	Internal cooling	6.0	28	6	36	66	●
DLD20610-C-DIN	Internal cooling	6.1	34	8	36	79	●
DLD20620-C-DIN	Internal cooling	6.2	34	8	36	79	●
DLD20630-C-DIN	Internal cooling	6.3	34	8	36	79	●
DLD20640-C-DIN	Internal cooling	6.4	34	8	36	79	●
DLD20650-C-DIN	Internal cooling	6.5	34	8	36	79	●
DLD20660-C-DIN	Internal cooling	6.6	34	8	36	79	●
DLD20670-C-DIN	Internal cooling	6.7	34	8	36	79	●
DLD20680-C-DIN	Internal cooling	6.8	34	8	36	79	●
DLD20690-C-DIN	Internal cooling	6.9	34	8	36	79	●
DLD20700-C-DIN	Internal cooling	7.0	34	8	36	79	●
DLD20710-C-DIN	Internal cooling	7.1	41	8	36	79	●
DLD20720-C-DIN	Internal cooling	7.2	41	8	36	79	●
DLD20730-C-DIN	Internal cooling	7.3	41	8	36	79	●
DLD20740-C-DIN	Internal cooling	7.4	41	8	36	79	●
DLD20750-C-DIN	Internal cooling	7.5	41	8	36	79	●
DLD20760-C-DIN	Internal cooling	7.6	41	8	36	79	●
DLD20770-C-DIN	Internal cooling	7.7	41	8	36	79	●
DLD20780-C-DIN	Internal cooling	7.8	41	8	36	79	●
DLD20790-C-DIN	Internal cooling	7.9	41	8	36	79	●
DLD20800-C-DIN	Internal cooling	8.0	41	8	36	79	●
DLD20810-C-DIN	Internal cooling	8.1	47	10	40	89	●
DLD20820-C-DIN	Internal cooling	8.2	47	10	40	89	●
DLD20830-C-DIN	Internal cooling	8.3	47	10	40	89	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD20840-C-DIN	Internal cooling	8.4	47	10	40	89	●
DLD20850-C-DIN	Internal cooling	8.5	47	10	40	89	●
DLD20860-C-DIN	Internal cooling	8.6	47	10	40	89	●
DLD20870-C-DIN	Internal cooling	8.7	47	10	40	89	●
DLD20880-C-DIN	Internal cooling	8.8	47	10	40	89	●
DLD20890-C-DIN	Internal cooling	8.9	47	10	40	89	●
DLD20900-C-DIN	Internal cooling	9.0	47	10	40	89	●
DLD20910-C-DIN	Internal cooling	9.1	47	10	40	89	●
DLD20920-C-DIN	Internal cooling	9.2	47	10	40	89	●
DLD20930-C-DIN	Internal cooling	9.3	47	10	40	89	●
DLD20940-C-DIN	Internal cooling	9.4	47	10	40	89	●
DLD20950-C-DIN	Internal cooling	9.5	47	10	40	89	●
DLD20960-C-DIN	Internal cooling	9.6	47	10	40	89	●
DLD20970-C-DIN	Internal cooling	9.7	47	10	40	89	●
DLD20980-C-DIN	Internal cooling	9.8	47	10	40	89	●
DLD20990-C-DIN	Internal cooling	9.9	47	10	40	89	●
DLD21000-C-DIN	Internal cooling	10.0	47	10	40	89	●
DLD21010-C-DIN	Internal cooling	10.1	55	12	45	102	●
DLD21020-C-DIN	Internal cooling	10.2	55	12	45	102	●
DLD21030-C-DIN	Internal cooling	10.3	55	12	45	102	●
DLD21040-C-DIN	Internal cooling	10.4	55	12	45	102	●
DLD21050-C-DIN	Internal cooling	10.5	55	12	45	102	●
DLD21060-C-DIN	Internal cooling	10.6	55	12	45	102	●
DLD21070-C-DIN	Internal cooling	10.7	55	12	45	102	●
DLD21080-C-DIN	Internal cooling	10.8	55	12	45	102	●
DLD21090-C-DIN	Internal cooling	10.9	55	12	45	102	●
DLD21100-C-DIN	Internal cooling	11.0	55	12	45	102	●
DLD21110-C-DIN	Internal cooling	11.1	55	12	45	102	●
DLD21120-C-DIN	Internal cooling	11.2	55	12	45	102	●
DLD21130-C-DIN	Internal cooling	11.3	55	12	45	102	●
DLD21140-C-DIN	Internal cooling	11.4	55	12	45	102	●
DLD21150-C-DIN	Internal cooling	11.5	55	12	45	102	●
DLD21160-C-DIN	Internal cooling	11.6	55	12	45	102	●
DLD21170-C-DIN	Internal cooling	11.7	55	12	45	102	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21180-C-DIN	Internal cooling	11.8	55	12	45	102	●
DLD21190-C-DIN	Internal cooling	11.9	55	12	45	102	●
DLD21200-C-DIN	Internal cooling	12.0	55	12	45	102	●
DLD21210-C-DIN	Internal cooling	12.1	60	14	45	107	●
DLD21220-C-DIN	Internal cooling	12.2	60	14	45	107	●
DLD21230-C-DIN	Internal cooling	12.3	60	14	45	107	●
DLD21240-C-DIN	Internal cooling	12.4	60	14	45	107	●
DLD21250-C-DIN	Internal cooling	12.5	60	14	45	107	●
DLD21260-C-DIN	Internal cooling	12.6	60	14	45	107	●
DLD21270-C-DIN	Internal cooling	12.7	60	14	45	107	●
DLD21280-C-DIN	Internal cooling	12.8	60	14	45	107	●
DLD21290-C-DIN	Internal cooling	12.9	60	14	45	107	●
DLD21300-C-DIN	Internal cooling	13.0	60	14	45	107	●
DLD21310-C-DIN	Internal cooling	13.1	60	14	45	107	●
DLD21320-C-DIN	Internal cooling	13.2	60	14	45	107	●
DLD21330-C-DIN	Internal cooling	13.3	60	14	45	107	●
DLD21340-C-DIN	Internal cooling	13.4	60	14	45	107	●
DLD21350-C-DIN	Internal cooling	13.5	60	14	45	107	●
DLD21360-C-DIN	Internal cooling	13.6	60	14	45	107	●
DLD21370-C-DIN	Internal cooling	13.7	60	14	45	107	●
DLD21380-C-DIN	Internal cooling	13.8	60	14	45	107	●
DLD21390-C-DIN	Internal cooling	13.9	60	14	45	107	●
DLD21400-C-DIN	Internal cooling	14.0	60	14	45	107	●
DLD21410-C-DIN	Internal cooling	14.1	65	16	48	115	●
DLD21420-C-DIN	Internal cooling	14.2	65	16	48	115	●
DLD21430-C-DIN	Internal cooling	14.3	65	16	48	115	●
DLD21440-C-DIN	Internal cooling	14.4	65	16	48	115	●
DLD21450-C-DIN	Internal cooling	14.5	65	16	48	115	●
DLD21460-C-DIN	Internal cooling	14.6	65	16	48	115	●
DLD21470-C-DIN	Internal cooling	14.7	65	16	48	115	●
DLD21480-C-DIN	Internal cooling	14.8	65	16	48	115	●
DLD21490-C-DIN	Internal cooling	14.9	65	16	48	115	●
DLD21500-C-DIN	Internal cooling	15.0	65	16	48	115	●
DLD21510-C-DIN	Internal cooling	15.1	65	16	48	115	●





TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21520-C-DIN	Internal cooling	15.2	65	16	48	115	●
DLD21530-C-DIN	Internal cooling	15.3	65	16	48	115	●
DLD21540-C-DIN	Internal cooling	15.4	65	16	48	115	●
DLD21550-C-DIN	Internal cooling	15.5	65	16	48	115	●
DLD21560-C-DIN	Internal cooling	15.6	65	16	48	115	●
DLD21570-C-DIN	Internal cooling	15.7	65	16	48	115	●
DLD21580-C-DIN	Internal cooling	15.8	65	16	48	115	●
DLD21590-C-DIN	Internal cooling	15.9	65	16	48	115	●
DLD21600-C-DIN	Internal cooling	16.0	65	16	48	115	●
DLD21610-C-DIN	Internal cooling	16.1	73	18	48	123	●
DLD21620-C-DIN	Internal cooling	16.2	73	18	48	123	●
DLD21630-C-DIN	Internal cooling	16.3	73	18	48	123	●
DLD21640-C-DIN	Internal cooling	16.4	73	18	48	123	●
DLD21650-C-DIN	Internal cooling	16.5	73	18	48	123	●
DLD21660-C-DIN	Internal cooling	16.6	73	18	48	123	●
DLD21670-C-DIN	Internal cooling	16.7	73	18	48	123	●
DLD21680-C-DIN	Internal cooling	16.8	73	18	48	123	●
DLD21690-C-DIN	Internal cooling	16.9	73	18	48	123	●
DLD21700-C-DIN	Internal cooling	17.0	73	18	48	123	●
DLD21710-C-DIN	Internal cooling	17.1	73	18	48	123	●
DLD21720-C-DIN	Internal cooling	17.2	73	18	48	123	●
DLD21730-C-DIN	Internal cooling	17.3	73	18	48	123	●
DLD21740-C-DIN	Internal cooling	17.4	73	18	48	123	●
DLD21750-C-DIN	Internal cooling	17.5	73	18	48	123	●
DLD21760-C-DIN	Internal cooling	17.6	73	18	48	123	●
DLD21770-C-DIN	Internal cooling	17.7	73	18	48	123	●
DLD21780-C-DIN	Internal cooling	17.8	73	18	48	123	●
DLD21790-C-DIN	Internal cooling	17.9	73	18	48	123	●
DLD21800-C-DIN	Internal cooling	18.0	73	18	48	123	●
DLD21810-C-DIN	Internal cooling	18.1	79	20	50	131	●
DLD21820-C-DIN	Internal cooling	18.2	79	20	50	131	●
DLD21830-C-DIN	Internal cooling	18.3	79	20	50	131	●
DLD21840-C-DIN	Internal cooling	18.4	79	20	50	131	●
DLD21850-C-DIN	Internal cooling	18.5	79	20	50	131	●

TYPE 형번	COOLING TYPE 냉각 타입	BASIC DIMENSION 치수(mm)					STOCK 재고
		DC	LCf	DMM	LS	OAL	
DLD21860-C-DIN	Internal cooling	18.6	79	20	50	131	●
DLD21870-C-DIN	Internal cooling	18.7	79	20	50	131	●
DLD21880-C-DIN	Internal cooling	18.8	79	20	50	131	●
DLD21890-C-DIN	Internal cooling	18.9	79	20	50	131	●
DLD21900-C-DIN	Internal cooling	19.0	79	20	50	131	●
DLD21910-C-DIN	Internal cooling	19.1	79	20	50	131	●
DLD21920-C-DIN	Internal cooling	19.2	79	20	50	131	●
DLD21930-C-DIN	Internal cooling	19.3	79	20	50	131	●
DLD21940-C-DIN	Internal cooling	19.4	79	20	50	131	●
DLD21950-C-DIN	Internal cooling	19.5	79	20	50	131	●
DLD21960-C-DIN	Internal cooling	19.6	79	20	50	131	●
DLD21970-C-DIN	Internal cooling	19.7	79	20	50	131	●
DLD21980-C-DIN	Internal cooling	19.8	79	20	50	131	●
DLD21990-C-DIN	Internal cooling	19.9	79	20	50	131	●
DLD22000-C-DIN	Internal cooling	20.0	79	20	50	131	●

● Stock Available 재고관리 ▲ Make to order 주문제작

DYNAMIC-DIN General Drill Parameter Recommendation Table (External cooling) 드릴 적용 추천표 (외부급유)

Workpiece Material 피삭재	Soft steel 연강 HB≤180		Carbon steel/alloy steel 탄소강 / 합금강 ~30HRC		Pre-hardened steel 프리하드강 ~40HRC		Cast iron 회주철		The nodular cast iron 구상흑연주철			
	60~120m/min		60~120m/min		40~70m/min		60~120m/min		50~100m/min			
Cutting speed 절삭속도	Rotating Speed 회전속도 (min ⁻¹)		Feed Speed 테이블 이송 (mm/min)		Rotating Speed 회전속도 (min ⁻¹)		Feed Speed 테이블 이송 (mm/min)		Rotating Speed 회전속도 (min ⁻¹)		Feed Speed 테이블 이송 (mm/min)	
3	9500	0.09~0.12	9500	0.09~0.12	6300	0.09~0.12	9500	0.09~0.12	7400	0.09~0.12		
4	7000	0.10~0.15	7000	0.10~0.15	4700	0.10~0.15	7000	0.10~0.15	5600	0.10~0.15		
5	5700	0.12~0.18	5700	0.12~0.18	3800	0.12~0.18	5700	0.12~0.18	4500	0.12~0.18		
6	4700	0.14~0.20	4700	0.14~0.20	3100	0.14~0.20	4700	0.14~0.20	3700	0.14~0.20		
8	3600	0.16~0.24	3600	0.16~0.24	2400	0.16~0.24	3600	0.16~0.24	2800	0.16~0.24		
10	2800	0.18~0.27	2800	0.18~0.27	1900	0.18~0.27	2800	0.18~0.27	2200	0.18~0.27		
12	2400	0.20~0.30	2400	0.20~0.30	1600	0.20~0.30	2400	0.20~0.30	1900	0.20~0.30		
14	2100	0.22~0.35	2100	0.22~0.35	1400	0.22~0.35	2100	0.22~0.35	1600	0.22~0.35		
16	1800	0.25~0.36	1800	0.25~0.36	1200	0.25~0.36	1800	0.25~0.36	1400	0.25~0.36		
18	1600	0.28~0.38	1600	0.28~0.38	1100	0.28~0.38	1600	0.28~0.38	1200	0.28~0.38		
20	1400	0.30~0.40	1400	0.30~0.40	950	0.30~0.40	1400	0.30~0.40	1100	0.30~0.40		

-  When using the tool for the first time, test cutting according to the above cutting speed of 90% or Feed speed of 85%. When the cutting condition is stable, the cutting speed and feed rate are increased one by one.
 초기 사용시 상기조건에서 절삭 속도 90%, 테이블 이송 85%로 조정하여 사용하세요.
 이후 안정화 되었을때 상기조건으로 진행하시면 됩니다.
-  This standard cutting conditions table is suitable for water-soluble cutting fluids.
 상기 절삭 조건표는 수용성 절삭유를 사용하는 조건의 추천표입니다.
-  When installing the drill, use a clean chuck without defects and keep the radial runout of the drill within 0.02mm.
 흠집이 없는 깨끗한 척을 사용하고, 드릴의 반경 방향 흔들림을 0.02mm 이내로 유지하십시오.
-  The cutting conditions of this table are suitable for occasions with hole depth below 5D.
 상기 표는 5D 깊이 홀에 적합합니다.

DYNAMIC-DIN General Drill Parameter Recommendation Table (Internal cooling) 드릴 적용 추천표 (내부급유)

Workpiece Material 파삭재	Soft steel 연 강 HB≤180		Carbon steel/alloy steel 탄소강 / 합금강 ~30HRC		Pre-hardened steel 프리하트강 ~40HRC		Cast iron 회주철		The nodular cast iron 구상흑연주철	
	60~120m/min		60~120m/min		40~70m/min		60~120m/min		50~100m/min	
Cutting speed 절삭속도										
Diameter 직경 (mm)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)	Rotating Speed 회전속도 (min ⁻¹)	Feed Speed 테이블 이송 (mm/min)
3	12700	0.09~0.12	12700	0.09~0.12	7400	0.09~0.12	12700	0.09~0.12	9500	0.09~0.12
4	9600	0.10~0.15	9600	0.10~0.15	5600	0.10~0.15	9600	0.10~0.15	7000	0.10~0.15
5	7600	0.12~0.18	7600	0.12~0.18	4500	0.12~0.18	7600	0.12~0.18	5700	0.12~0.18
6	6400	0.14~0.20	6400	0.14~0.20	3700	0.14~0.20	6400	0.14~0.20	4700	0.14~0.20
8	4800	0.16~0.24	4800	0.16~0.24	2800	0.16~0.24	4800	0.16~0.24	3600	0.16~0.24
10	3800	0.18~0.27	3800	0.18~0.27	2200	0.18~0.27	3800	0.18~0.27	2800	0.18~0.27
12	3200	0.20~0.30	3200	0.20~0.30	1900	0.20~0.30	3200	0.20~0.30	2400	0.20~0.30
14	2700	0.22~0.35	2700	0.22~0.35	1600	0.22~0.35	2700	0.22~0.35	2100	0.22~0.35
16	2400	0.25~0.36	2400	0.25~0.36	1400	0.25~0.36	2400	0.25~0.36	1800	0.25~0.36
18	2100	0.28~0.38	2100	0.28~0.38	1200	0.28~0.38	2100	0.28~0.38	1600	0.28~0.38
20	1900	0.30~0.40	1900	0.30~0.40	1100	0.30~0.40	1900	0.30~0.40	1400	0.30~0.40

☑ When using the tool for the first time, test cutting according to the above cutting speed of 90% or Feed speed of 85%. When the cutting condition is stable, the cutting speed and feed rate are increased one by one.
초기 사용시 상기조건에서 절삭 속도 90%, 테이블 이송 85%로 조정하여 사용하세요.
이후 안정화 되었을때 상기조건으로 진행하시면 됩니다.

☑ This standard cutting conditions table is suitable for water-soluble cutting fluids.
상기 절삭 조건표는 수용성 절삭유를 사용하는 조건의 추천표입니다.

☑ When installing the drill, use a clean chuck without defects and keep the radial runout of the drill within 0.02mm.
흠집이 없는 깨끗한 척을 사용하고, 드릴의 반경 방향 흔들림을 0.02mm 이내로 유지하십시오.

☑ The cutting conditions of this table are suitable for occasions with hole depth below 5D.
상기 표는 5D 깊이 홀에 적합합니다.





TIGER
TOOLING SYSTEM

본 사
Head Office

경기도 성남시 중원구 사기막골로 124, SKN테크노파크 메가동 1011호
Megadong 1011-ho, SKN Techopark, Sagimakgol-ro 124,
Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea

TEL : 070-8731-1115 FAX : 070-8731-1114

kceraexport@gmail.com

남 부 지 사
South Branch

울산광역시 중구 동천1길 40, 세영이노세븐 지식산업센터 C903호
Seyoung inno7 C903-ho, 40, Dongcheon 1-gil, Jung-gu, Ulsan, Korea

TEL : 052-225-0982 FAX : 052-225-0983

중 부 지 사
Central Branch

서울특별시 구로구 경인로55길 21, 우성빌딩 110호
Woosung Bldg 110-ho, 21, Gyeongin-ro 55gil, Guro-gu, Seoul, Korea

TEL : 02-2633-1801 FAX : 02-2678-5462

A decorative graphic at the bottom of the page consisting of a network of blue dots connected by thin lines, resembling a molecular or data network structure.