



- **고경도강(HRc52~68), 프리하드강 계열의 고정밀 가공 엔드밀**
- 고품량 실리콘계 코팅(Si) 처리하여 내마모성이 우수합니다.
- 고정밀 공차 적용으로 초정밀 가공에 적합합니다.
- 날부인선의 조도가 뛰어나 피삭재의 면조도가 우수합니다.
- 초미립자 초경합금(0.2µm)을 채택, 고속절삭시 뛰어난 성능을 발휘합니다.
- **Endmills for pre-hardened and hardened steel(HRc52~68)**
- Good wear resistance by high quality Si-based PVD coating.
- High precise edge tolerance.
- Very nice work surface finish.
- Outstanding performance at high speed machining by ultra fine (0.2µm) WC grade.



0.05 ~ 2.5R 3 ~ 6R 391P

D Size	D Tolerance
Ø 0.1 ~ 0.15	+0 ~ -0.005mm
Ø 0.2 ~ 5	+0 ~ -0.01mm
Ø 6 ~ 12	-0.005 ~ -0.015mm

단위 : mm

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
2JJRB 001 003 S04	0.05R X 0.1	0.15	0.3	40	4	
2JJRB 001 005 S04	0.05R X 0.1	0.15	0.5	40	4	
2JJRB 0015 003 S04	0.075R X 0.15	0.15	0.3	40	4	
2JJRB 0015 005 S04	0.075R X 0.15	0.15	0.5	40	4	
2JJRB 0015 010 S04	0.075R X 0.15	0.15	1	40	4	
2JJRB 002 005 S04	0.1R X 0.2	0.2	0.5	40	4	
2JJRB 002 010 S04	0.1R X 0.2	0.2	1	40	4	
2JJRB 002 015 S04	0.1R X 0.2	0.2	1.5	40	4	
2JJRB 002 020 S04	0.1R X 0.2	0.2	2	40	4	
2JJRB 002 025 S04	0.1R X 0.2	0.2	2.5	40	4	
2JJRB 002 030 S04	0.1R X 0.2	0.2	3	40	4	
2JJRB 0025 005 S04	0.125R X 0.25	0.25	0.5	40	4	
2JJRB 0025 010 S04	0.125R X 0.25	0.25	1	40	4	
2JJRB 0025 015 S04	0.125R X 0.25	0.25	1.5	40	4	
2JJRB 0025 020 S04	0.125R X 0.25	0.25	2	40	4	
2JJRB 0025 025 S04	0.125R X 0.25	0.25	2.5	40	4	
2JJRB 0025 030 S04	0.125R X 0.25	0.25	3	40	4	
2JJRB 003 010 S04	0.15R X 0.3	0.3	1	40	4	
2JJRB 003 015 S04	0.15R X 0.3	0.3	1.5	40	4	
2JJRB 003 020 S04	0.15R X 0.3	0.3	2	40	4	
2JJRB 003 025 S04	0.15R X 0.3	0.3	2.5	40	4	
2JJRB 003 030 S04	0.15R X 0.3	0.3	3	40	4	
2JJRB 003 035 S04	0.15R X 0.3	0.3	3.5	40	4	
2JJRB 003 040 S04	0.15R X 0.3	0.3	4	40	4	
2JJRB 003 050 S04	0.15R X 0.3	0.3	5	40	4	
2JJRB 004 010 S04	0.2R X 0.4	0.4	1	40	4	
2JJRB 004 015 S04	0.2R X 0.4	0.4	1.5	40	4	
2JJRB 004 020 S04	0.2R X 0.4	0.4	2	40	4	
2JJRB 004 025 S04	0.2R X 0.4	0.4	2.5	40	4	
2JJRB 004 030 S04	0.2R X 0.4	0.4	3	40	4	
2JJRB 004 035 S04	0.2R X 0.4	0.4	3.5	40	4	
2JJRB 004 040 S04	0.2R X 0.4	0.4	4	40	4	
2JJRB 004 045 S04	0.2R X 0.4	0.4	4.5	40	4	
2JJRB 004 050 S04	0.2R X 0.4	0.4	5	40	4	
2JJRB 004 060 S04	0.2R X 0.4	0.4	6	40	4	
2JJRB 004 080 S04	0.2R X 0.4	0.4	8	40	4	
2JJRB 005 010 S04	0.25R X 0.5	0.5	1	45	4	
2JJRB 005 010 S06	0.25R X 0.5	0.5	1	50	6	
2JJRB 005 015 S04	0.25R X 0.5	0.5	1.5	45	4	
2JJRB 005 020 S04	0.25R X 0.5	0.5	2	45	4	
2JJRB 005 020 S06	0.25R X 0.5	0.5	2	50	6	
2JJRB 005 025 S04	0.25R X 0.5	0.5	2.5	45	4	
2JJRB 005 030 S04	0.25R X 0.5	0.5	3	45	4	
2JJRB 005 030 S06	0.25R X 0.5	0.5	3	50	6	
2JJRB 005 035 S04	0.25R X 0.5	0.5	3.5	45	4	
2JJRB 005 040 S04	0.25R X 0.5	0.5	4	45	4	
2JJRB 005 040 S06	0.25R X 0.5	0.5	4	50	6	
2JJRB 005 045 S04	0.25R X 0.5	0.5	4.5	45	4	
2JJRB 005 050 S04	0.25R X 0.5	0.5	5	45	4	
2JJRB 005 050 S06	0.25R X 0.5	0.5	5	50	6	

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
2JJRB 005 060 S04	0.25R X 0.5	0.5	6	45	4	
2JJRB 005 060 S06	0.25R X 0.5	0.5	6	50	6	
2JJRB 005 080 S04	0.25R X 0.5	0.5	8	45	4	
2JJRB 005 100 S04	0.25R X 0.5	0.5	10	45	4	
2JJRB 005 120 S04	0.25R X 0.5	0.5	12	45	4	
2JJRB 006 010 S04	0.3R X 0.6	0.6	1	45	4	
2JJRB 006 010 S06	0.3R X 0.6	0.6	1	50	6	
2JJRB 006 020 S04	0.3R X 0.6	0.6	2	45	4	
2JJRB 006 020 S06	0.3R X 0.6	0.6	2	50	6	
2JJRB 006 030 S04	0.3R X 0.6	0.6	3	45	4	
2JJRB 006 030 S06	0.3R X 0.6	0.6	3	50	6	
2JJRB 006 040 S04	0.3R X 0.6	0.6	4	45	4	
2JJRB 006 040 S06	0.3R X 0.6	0.6	4	50	6	
2JJRB 006 050 S04	0.3R X 0.6	0.6	5	45	4	
2JJRB 006 050 S06	0.3R X 0.6	0.6	5	50	6	
2JJRB 006 060 S04	0.3R X 0.6	0.6	6	45	4	
2JJRB 006 060 S06	0.3R X 0.6	0.6	6	50	6	
2JJRB 006 080 S04	0.3R X 0.6	0.6	8	45	4	
2JJRB 006 080 S06	0.3R X 0.6	0.6	8	50	6	
2JJRB 006 100 S04	0.3R X 0.6	0.6	10	45	4	
2JJRB 006 120 S04	0.3R X 0.6	0.6	12	45	4	
2JJRB 006 140 S04	0.3R X 0.6	0.6	14	45	4	
2JJRB 007 020 S04	0.35R X 0.7	0.7	2	45	4	
2JJRB 007 040 S04	0.35R X 0.7	0.7	4	45	4	
2JJRB 007 060 S04	0.35R X 0.7	0.7	6	45	4	
2JJRB 007 080 S04	0.35R X 0.7	0.7	8	45	4	
2JJRB 007 100 S04	0.35R X 0.7	0.7	10	45	4	
2JJRB 007 120 S04	0.35R X 0.7	0.7	12	45	4	
2JJRB 008 020 S04	0.4R X 0.8	0.8	2	45	4	
2JJRB 008 020 S06	0.4R X 0.8	0.8	2	50	6	
2JJRB 008 030 S04	0.4R X 0.8	0.8	3	45	4	
2JJRB 008 030 S06	0.4R X 0.8	0.8	3	50	6	
2JJRB 008 040 S04	0.4R X 0.8	0.8	4	45	4	
2JJRB 008 040 S06	0.4R X 0.8	0.8	4	50	6	
2JJRB 008 050 S04	0.4R X 0.8	0.8	5	45	4	
2JJRB 008 050 S06	0.4R X 0.8	0.8	5	50	6	
2JJRB 008 060 S04	0.4R X 0.8	0.8	6	45	4	
2JJRB 008 060 S06	0.4R X 0.8	0.8	6	50	6	
2JJRB 008 080 S04	0.4R X 0.8	0.8	8	45	4	
2JJRB 008 080 S06	0.4R X 0.8	0.8	8	50	6	
2JJRB 008 100 S04	0.4R X 0.8	0.8	10	45	4	
2JJRB 008 120 S04	0.4R X 0.8	0.8	12	45	4	
2JJRB 009 040 S04	0.45R X 0.9	0.9	4	45	4	
2JJRB 009 060 S04	0.45R X 0.9	0.9	6	45	4	
2JJRB 009 080 S04	0.45R X 0.9	0.9	8	45	4	
2JJRB 009 100 S04	0.45R X 0.9	0.9	10	50	4	
2JJRB 009 120 S04	0.45R X 0.9	0.9	12	50	4	
2JJRB 010 020 S04	0.5R X 1	1	2	45	4	
2JJRB 010 020 S06	0.5R X 1	1	2	50	6	
2JJRB 010 030 S04	0.5R X 1	1	3	45	4	

단위 : mm

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	생크 Shank Dia d	비고	Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	생크 Shank Dia d	비고
2JJRB 010 030 S06	0.5R X 1	1	3	50	6		2JJRB 015 160 S04	0.75R X 1.5	1.5	16	50	4	
2JJRB 010 040 S04	0.5R X 1	1	4	45	4		2JJRB 015 160 S06	0.75R X 1.5	1.5	16	60	6	
2JJRB 010 040 S06	0.5R X 1	1	4	50	6		2JJRB 015 180 S04	0.75R X 1.5	1.5	18	50	4	
2JJRB 010 050 S04	0.5R X 1	1	5	45	4		2JJRB 015 200 S04	0.75R X 1.5	1.5	20	50	4	
2JJRB 010 050 S06	0.5R X 1	1	5	50	6		2JJRB 015 220 S04	0.75R X 1.5	1.5	22	60	4	
2JJRB 010 060 S04	0.5R X 1	1	6	45	4		2JJRB 015 250 S04	0.75R X 1.5	1.5	25	60	4	
2JJRB 010 060 S06	0.5R X 1	1	6	50	6		2JJRB 015 300 S04	0.75R X 1.5	1.5	30	70	4	
2JJRB 010 080 S04	0.5R X 1	1	8	45	4		2JJRB 016 060 S04	0.8R X 1.6	1.6	6	45	4	
2JJRB 010 080 S06	0.5R X 1	1	8	50	6		2JJRB 016 080 S04	0.8R X 1.6	1.6	8	45	4	
2JJRB 010 100 S04	0.5R X 1	1	10	50	4		2JJRB 016 120 S04	0.8R X 1.6	1.6	12	50	4	
2JJRB 010 100 S06	0.5R X 1	1	10	50	6		2JJRB 016 160 S04	0.8R X 1.6	1.6	16	50	4	
2JJRB 010 120 S04	0.5R X 1	1	12	50	4		2JJRB 016 200 S04	0.8R X 1.6	1.6	20	50	4	
2JJRB 010 120 S06	0.5R X 1	1	12	50	6		2JJRB 018 060 S04	0.9R X 1.8	1.8	6	45	4	
2JJRB 010 140 S04	0.5R X 1	1	14	50	4		2JJRB 018 080 S04	0.9R X 1.8	1.8	8	45	4	
2JJRB 010 160 S04	0.5R X 1	1	16	50	4		2JJRB 018 120 S04	0.9R X 1.8	1.8	12	50	4	
2JJRB 010 180 S04	0.5R X 1	1	18	50	4		2JJRB 018 160 S04	0.9R X 1.8	1.8	16	50	4	
2JJRB 010 200 S04	0.5R X 1	1	20	50	4		2JJRB 018 200 S04	0.9R X 1.8	1.8	20	50	4	
2JJRB 010 220 S04	0.5R X 1	1	22	60	4		2JJRB 020 040 S04	1R X 2	2	4	45	4	
2JJRB 010 250 S04	0.5R X 1	1	25	60	4		2JJRB 020 040 S06	1R X 2	2	4	50	6	
2JJRB 012 040 S04	0.6R X 1.2	1.2	4	45	4		2JJRB 020 060 S04	1R X 2	2	6	45	4	
2JJRB 012 040 S06	0.6R X 1.2	1.2	4	50	6		2JJRB 020 060 S06	1R X 2	2	6	50	6	
2JJRB 012 060 S04	0.6R X 1.2	1.2	6	45	4		2JJRB 020 080 S04	1R X 2	2	8	45	4	
2JJRB 012 060 S06	0.6R X 1.2	1.2	6	50	6		2JJRB 020 080 S06	1R X 2	2	8	50	6	
2JJRB 012 080 S04	0.6R X 1.2	1.2	8	45	4		2JJRB 020 100 S04	1R X 2	2	10	50	4	
2JJRB 012 080 S06	0.6R X 1.2	1.2	8	50	6		2JJRB 020 100 S06	1R X 2	2	10	50	6	
2JJRB 012 100 S04	0.6R X 1.2	1.2	10	50	4		2JJRB 020 120 S04	1R X 2	2	12	50	4	
2JJRB 012 100 S06	0.6R X 1.2	1.2	10	50	6		2JJRB 020 120 S06	1R X 2	2	12	50	6	
2JJRB 012 120 S04	0.6R X 1.2	1.2	12	50	4		2JJRB 020 140 S04	1R X 2	2	14	50	4	
2JJRB 012 120 S06	0.6R X 1.2	1.2	12	50	6		2JJRB 020 140 S06	1R X 2	2	14	50	6	
2JJRB 012 160 S04	0.6R X 1.2	1.2	16	50	4		2JJRB 020 160 S04	1R X 2	2	16	50	4	
2JJRB 012 200 S04	0.6R X 1.2	1.2	20	50	4		2JJRB 020 160 S06	1R X 2	2	16	60	6	
2JJRB 012 240 S04	0.6R X 1.2	1.2	24	60	4		2JJRB 020 180 S04	1R X 2	2	18	50	4	
2JJRB 014 060 S04	0.7R X 1.4	1.4	6	45	4		2JJRB 020 180 S06	1R X 2	2	18	60	6	
2JJRB 014 080 S04	0.7R X 1.4	1.4	8	45	4		2JJRB 020 200 S04	1R X 2	2	20	50	4	
2JJRB 014 120 S04	0.7R X 1.4	1.4	12	50	4		2JJRB 020 200 S06	1R X 2	2	20	60	6	
2JJRB 014 160 S04	0.7R X 1.4	1.4	16	50	4		2JJRB 020 220 S04	1R X 2	2	22	60	4	
2JJRB 015 030 S04	0.75R X 1.5	1.5	3	45	4		2JJRB 020 250 S04	1R X 2	2	25	60	4	
2JJRB 015 030 S06	0.75R X 1.5	1.5	3	50	6		2JJRB 020 300 S04	1R X 2	2	30	60	4	
2JJRB 015 040 S04	0.75R X 1.5	1.5	4	45	4		2JJRB 025 080 S04	1.25R X 2.5	2.5	8	45	4	
2JJRB 015 040 S06	0.75R X 1.5	1.5	4	50	6		2JJRB 025 080 S06	1.25R X 2.5	2.5	8	50	6	
2JJRB 015 060 S04	0.75R X 1.5	1.5	6	45	4		2JJRB 025 100 S04	1.25R X 2.5	2.5	10	50	4	
2JJRB 015 060 S06	0.75R X 1.5	1.5	6	50	6		2JJRB 025 100 S06	1.25R X 2.5	2.5	10	50	6	
2JJRB 015 080 S04	0.75R X 1.5	1.5	8	45	4		2JJRB 025 120 S04	1.25R X 2.5	2.5	12	50	4	
2JJRB 015 080 S06	0.75R X 1.5	1.5	8	50	6		2JJRB 025 120 S06	1.25R X 2.5	2.5	12	50	6	
2JJRB 015 100 S04	0.75R X 1.5	1.5	10	50	4		2JJRB 025 160 S04	1.25R X 2.5	2.5	16	50	4	
2JJRB 015 100 S06	0.75R X 1.5	1.5	10	50	6		2JJRB 025 160 S06	1.25R X 2.5	2.5	16	60	6	
2JJRB 015 120 S04	0.75R X 1.5	1.5	12	50	4		2JJRB 025 200 S04	1.25R X 2.5	2.5	20	60	4	
2JJRB 015 120 S06	0.75R X 1.5	1.5	12	50	6		2JJRB 025 200 S06	1.25R X 2.5	2.5	20	60	6	
2JJRB 015 140 S04	0.75R X 1.5	1.5	14	50	4		2JJRB 025 250 S04	1.25R X 2.5	2.5	25	60	4	
2JJRB 015 140 S06	0.75R X 1.5	1.5	14	50	6		2JJRB 025 300 S04	1.25R X 2.5	2.5	30	70	4	

단위 : mm

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Dia d	비고	Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Dia d	비고
2JJRB 030 060 S06	1.5R X 3	3	6	50	6								
2JJRB 030 080 S06	1.5R X 3	3	8	50	6								
2JJRB 030 100 S06	1.5R X 3	3	10	50	6								
2JJRB 030 120 S06	1.5R X 3	3	12	50	6								
2JJRB 030 160 S06	1.5R X 3	3	16	60	6								
2JJRB 030 200 S06	1.5R X 3	3	20	60	6								
2JJRB 030 250 S06	1.5R X 3	3	25	65	6								
2JJRB 030 300 S06	1.5R X 3	3	30	70	6								
2JJRB 030 350 S06	1.5R X 3	3	35	75	6								
2JJRB 030 400 S06	1.5R X 3	3	40	80	6								
2JJRB 030 450 S06	1.5R X 3	3	45	90	6								
2JJRB 030 500 S06	1.5R X 3	3	50	100	6								
2JJRB 035 100 S06	1.75R X 3.5	3.5	10	50	6								
2JJRB 035 150 S06	1.75R X 3.5	3.5	15	60	6								
2JJRB 035 200 S06	1.75R X 3.5	3.5	20	60	6								
2JJRB 035 250 S06	1.75R X 3.5	3.5	25	65	6								
2JJRB 035 300 S06	1.75R X 3.5	3.5	30	70	6								
2JJRB 035 350 S06	1.75R X 3.5	3.5	35	75	6								
2JJRB 035 400 S06	1.75R X 3.5	3.5	40	80	6								
2JJRB 040 080 S06	2R X 4	4	8	50	6								
2JJRB 040 100 S06	2R X 4	4	10	50	6								
2JJRB 040 120 S06	2R X 4	4	12	50	6								
2JJRB 040 160 S06	2R X 4	4	16	60	6								
2JJRB 040 200 S06	2R X 4	4	20	60	6								
2JJRB 040 250 S06	2R X 4	4	25	65	6								
2JJRB 040 300 S06	2R X 4	4	30	70	6								
2JJRB 040 350 S06	2R X 4	4	35	75	6								
2JJRB 040 400 S06	2R X 4	4	40	80	6								
2JJRB 040 450 S06	2R X 4	4	45	90	6								
2JJRB 040 500 S06	2R X 4	4	50	100	6								
2JJRB 050 160 S06	2.5R X 5	6	16	60	6								
2JJRB 050 200 S06	2.5R X 5	6	20	60	6								
2JJRB 050 250 S06	2.5R X 5	6	25	70	6								
2JJRB 050 300 S06	2.5R X 5	6	30	75	6								
2JJRB 050 400 S06	2.5R X 5	6	40	80	6								
2JJRB 050 450 S06	2.5R X 5	6	45	90	6								
2JJRB 050 500 S06	2.5R X 5	6	50	100	6								
2JJRB 060 150 S06	3R X 6	10	15	55	6								
2JJRB 060 300 100	3R X 6	10	30	100	6								
2JJRB 060 500 120	3R X 6	10	50	120	6								
2JJRB 080 250 060	4R X 8	12	25	60	8								
2JJRB 080 300 100	4R X 8	12	30	100	8								
2JJRB 080 600 120	4R X 8	12	60	120	8								
2JJRB 100 300 070	5R X 10	16	30	70	10								
2JJRB 100 450 100	5R X 10	16	45	100	10								
2JJRB 100 600 130	5R X 10	16	60	130	10								
2JJRB 120 300 075	6R X 12	18	30	75	12								
2JJRB 120 500 110	6R X 12	18	50	110	12								
2JJRB 120 600 130	6R X 12	18	60	130	12								