KOVOSVITAVY s.r.o.

CARBIDE END MILLS

Carbide End Mills Series

HP-MAX (General Purpose)
HM-MAX (Multi-Function Purpose)
HY-MAX (For Hardened Steel 48-65HRC)
HS-MAX (For Stainless Steel)
HR-MAX (High-Precision Deep Cavity Processing)
ALU-MAX (For Aluminum Alloy)
DIA-MAX (For Graphite)

We have a passion for quality

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KOVOSVITAVY s.r.o.

let's dance to the future

- Top performance
- High quality
- Cost efficient process
- Unique process

Meaning of icons

Tool Materials

CARBIDE MG	Micro Grain Carbide
CARBIDE SUPER	Super Micro Grain Carbide
CARBIDE NANO	Nano Grain Carbide

Coating

HP MAX	ALTiCrN-HP Coating
HM MAX	ALTiN-HM Coating
HY MAX	ALTiSiN-HY Coating
HR MAX	ALTiSin-HR Coating
HS MAX	ALTiCrN-HS Coating
DIA CVD	DIAMOND CVD Coating

Number of Flutes

2	2 Flute	4	4 Flute
3	3 Flute	6	6 Flute

Helix Angle

25° Helix	25°	35° Helix	35°
27° Helix	27°	45° Helix	45°
30° Helix	30°	55° Helix	55°

Ball Radius Tolerance

R ±0.005	Ball Radius Tolerance ±0.005
R ±0.01	Ball Radius Tolerance ±0.01

Corner Radius Tolerance

CR ±0.01	Corner Radius Tolerance ±0.01

Out Diameter Tolerance

D 0/-0.015	Diameter Tolerance is 0 ~ -0.015
D 0/-0.02	Diameter Tolerance is 0 ~ -0.02

Features of Coating

Type	Color	Hardness	Heat Resistance	Coefficient of Friction	Coating Thickness	Recommended Parts
HY MAX	COPPER	3500~3600(HV)	Very Good	Normal	2~4	Steel
DIA CVD	Black	9000~10,000(HV)	Normal	Very Good	4~18	Graphite, Copper, Glass-fiberreinforced plastic

HY MAX

- A multi-layer coating with a nano-composite outer layer with Si3N4 nano-crystallites in a crystalline TiN matrix.
- This coating is designed to protect the cutting edge from heat transfer, oxidation and abrasion.
- The coating is designed to allow a cutting edge temperature of up to 1100°C.

DIAMOND

- A polycrystalline diamond coating that has the characteristics of pure diamond.
- The diamond coating's high heat conductivity makes for fast heat dissipation. When processing temperature-sensitive materials such as carbon and glass-fiberreinforced plastics, and allows higher processing speed during machining.
- Its very low coefficient of friction exhibits excellent performance in machining a wide range of sticky materials.
- It also has the highest tensile and compressive strength.

Producing Process

NO.1

High quality bar selection

The cutter adopts European quality 0.2 um , 0.4 um of ultra-fine particle tungsten steel bars, high rigidity and strong resistance to strong guarantee for the service life of the cutter.

NO.2

Advanced grinding equipment

The cutter adopts Germany WALTER and Australia´s ACNA as the world´s top universal tool grinding machine precision and grinding, ensure that every tool very good uniformity and stability.

NO.3

Full automation products manufacturing

The cutter adopts fully automatic manufacturing process strict and high standard, efficient an high quality production system, to further strengthen and improve the stability of cutting tool.

NO.4

Top coating technology

The cutter by Swiss PLATIT coating technology, excellent wear resistance and high efficient lubrication to ensure the service life of the cutter has extraordinary.

NO.5

Strict quality inspection

The cutter adopts Germany ZOLLER 3D measuring instrument, achieves the product 100% detection, to ensure that each one toll factory precision 100% pass rate.

CARBIDE END MILL
General Catalog

KOVOSVITAVY s.r.o.

- HP-MAX: Ball, Radius, Flat
- HM-MAX: Ball, Radius, Flat
- HY-MAX: Ball, Radius, Flat
- HS-MAX: Ball, Radius, Flat
- HR-MAX: Ball, Radius, Flat
- ALU-MAX: Flat, Ball
- DIA-MAX: Ball, Radius, Flat

Introduction
Carbide End Mill Series

PHOTO		SPECIFICATION			
		Model	Flutes/Helix	Effective Length	Page / Size List
HP-MAX END MILL SERIES (General Purpose)					
BALL END MILL					
	2F Ball End Mill	HPB230	2 / 30° Helix	adopted	P. 19
FLAT END MILL					
	4F Radius End Mill	HPR435	4 / 35° Helix	adopted	P. 20
FLAT END MILL					
	4F Flat End Mill	HPE435	4 / 35° Helix	adopted	P. 21
	4F Long Flute Flat End Mill	HPEL435	4 / 35° Helix	adopted	P. 22
	2F Flat End Mill	HPE235	2 / 35° Helix	adopted	P. 23
	2F Long Flute Flat End Mill	HPEL235	2 / 35° Helix	adopted	P. 24
HM-MAX END MILL SERIES (Multi-Function Purpose)					
BALL END MILL					
	2F Ball End Mill	HMB230	2 / 30° Helix	adopted	P. 25
RADIUS END MILL					
	4F Radius End Mill	HMR435	4 / 35° Helix	adopted	P. 26
FLAT END MILL					
	4F Flat End Mill	HME435	4 / 35° Helix	adopted	P. 27
	4F Long Flute Flat End Mill	HMEL435	4 / 35° Helix	adopted	P. 28
	2F Flat End Mill	HME235	2 / 35° Helix	adopted	P. 29
	2F Long Flute Flat End Mill	HMEL235	2 / 35° Helix	adopted	P. 30

* Applicable Work Material (● Most Suitable ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC				
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HP-MAX

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HM-MAX

Introduction
Carbide End Mill Series

PHOTO	SPECIFICATION			
	Model	Flutes/Helix	Effective Length	Page / Size List
HM-MAX END MILL SERIES **(Multi-Function Purpose)**				
FLAT END MILL				
 6F Flat End Mill	**HME645**	6 / 45° Helix	adopted	P. **31**
 6F Long Flute Flat End Mill	**HMEL645**	6 / 45° Helix	adopted	P. **32**
 4F Roughing Flat End Mill	**HMRE430**	4 / 30° Helix	adopted	P. **33**
 4F Long Flute Roughing Flat End Mill	**HMREL430**	4 / 30° Helix	adopted	P. **34**
HY-MAX END MILL SERIES **(For Hardened Steel 48-65HRC)**				
BALL END MILL				
 2F Ball End Mill	**HYB230**	2 / 30° Helix	adopted	P. **35**
RADIUS END MILL				
 4F Rudius End Mill	**HYR435**	4 / 35° Helix	adopted	P. **36**
FLAT END MILL				
 4F Flat End Mill	**HYE435**	4 / 35° Helix	adopted	P. **37**
 4F Long Flute Flat End Mill	**HYEL435**	4 / 35° Helix	Not	P. **38**
 2F Flat End Mill	**HYE235**	2 / 35° Helix	adopted	P. **39**
 2F Long Flute Flat End Mill	**HYEL235**	2 / 35° Helix	Not	P. **40**

* Applicable Work Material (● Most Suitable ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC				
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HM-MAX

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HY-MAX

Introduction
Carbide End Mill Series

PHOTO	SPECIFICATION			
	Model	Flutes/Helix	Effective Length	Page / Size List

HS-MAX END MILL SERIES (For Stainless Steel)

BALL END MILL

	2F Ball End Mill	HSB230	2 / 30° Helix	adopted	P. 41

RADIUS END MILL

	4F Radius End Mill	HSR435	4 / 35° Helix	adopted	P. 42

FLAT END MILL

	4F Flat End Mill	HSE435	4 / 35° Helix	Not	P. 43
	4F Long Flute Flat End Mill	HSEL435	4 / 35° Helix	adopted	P. 44
	2F Flat End Mill	HSE235	2 / 35° Helix	adopted	P. 45
	2F Long Flute Flat End Mill	HSEL235	2 / 35° Helix	adopted	P. 46

HR-MAX END MILL SERIES (High-Precision Deep Cavity Processing)

BALL END MILL

	2F Rib Ball End Mill	HRB230	2 / 30° Helix	adopted	P. 47

RADIUS END MILL

	2F Rib Radius End Mill	HRR230	2 / 30° Helix	adopted	P. 49
	4F Rib Radius End Mill	HRR430	4 / 30° Helix	adopted	P. 50

FLAT END MILL

	2F Rib Flat End Mill	HRE230	2 / 30° Helix	adopted	P. 52
	4F Rib Flat End Mill	HRE430	4 / 30° Helix	adopted	P. 54

* Applicable Work Material (○ Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
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Introduction
Carbide End Mill Series

PHOTO	SPECIFICATION			
	Model	Flutes/Helix	Effective Length	Page / Size List
ALU-MAX END MILL SERIES **(For Aluminum Alloy)**				
BALL END MILL				
 2F Ball End Mill	ALB230	2 / 30° Helix	adopted	P. 55
FLAT END MILL				
 2F Flat End Mill	ALE255	2 / 55° Helix	adopted	P. 56
 2F Long Flute Flat End Mill	ALEL255	2 / 55° Helix	adopted	P. 57
 3F Flat End Mill	ALE345	3 / 45° Helix	adopted	P. 58
 3F Long Flute Flat End Mill	ALEL345	3 / 45° Helix	adopted	P. 59
 3F Roughing Flat End Mill	ALR327	2 / 27° Helix	adopted	P. 60
DIA-MAX END MILL SERIES **(For Graphite)**				
BALL END MILL				
 2F Rib Ball End Mill	DMRB230	2 / 30° Helix	adopted	P. 61
 2F Long Shank Rib Ball End Mill	DMRBL230	2 / 30° Helix	adopted	P. 61
RADIUS END MILL				
 2F Rib Radius End Mill	DMRR230	2 / 30° Helix	Not	P. 62
 4F Rib Radius End Mill	DMRR430	4 / 30° Helix	adopted	P. 63
 4F Long Shank Rib Radius End Mill	DMRRL430	4 / 30° Helix	adopted	P. 64
FLAT END MILL				
 2F Rib Flat End Mill	DMRE230	2 / 30° Helix	Not	P. 65
 4F Rib Flat End Mill	DMRE430	4 / 30° Helix	adopted	P. 66
 4F Long Shank Rib Flute Flat End Mill	DMREL430	4 / 30° Helix	adopted	P. 67

* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC				
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ALU-MAX

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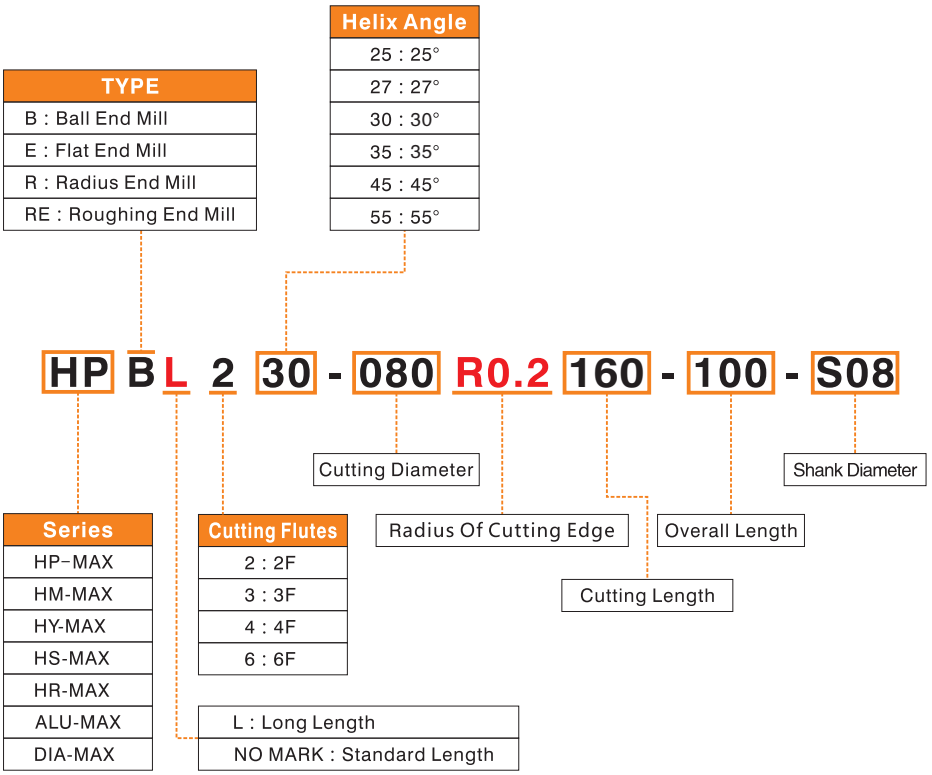
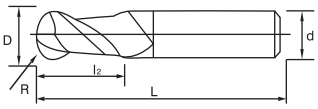
DIA-MAX

Detailed explanation of the model



HPB230 | HP-MAX Ball End Mill 2-Flute 30°



CARBIDE MG | HP MAX | 2 | 30° Helix | R ±0.005 D≤6 | R ±0.01 D>6 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

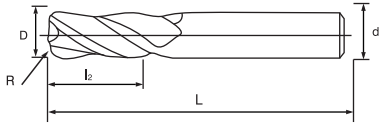
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC					
○	○	○	●	–	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia	
	R	l_2	L	d	
HPB230-010020-050-S04	0.5	2	50	4	
HPB230-015030-050-S04	0.75	3	50	4	
HPB230-020040-050-S04	1	4	50	4	
HPB230-030060-050-S04	1.5	6	50	4	
HPB230-030060-050-S04	1.5	6	50	4	
HPB230-040080-050-S04	2	8	50	4	
HPB230-040080-050-S06	2	8	50	6	
HPB230-050100-050-S06	2.5	10	50	6	
HPB230-060120-050-S06	3	12	50	6	
HPB230-060120-075-S06	3	12	75	6	
HPB230-060120-100-S06	3	12	100	6	
HPB230-080160-060-S08	4	16	60	8	
HPB230-080160-075-S08	4	16	75	8	
HPB230-080160-100-S08	4	16	100	8	
HPB230-100200-075-S10	5	20	75	10	
HPB230-100200-100-S10	5	20	100	10	
HPB230-120240-075-S12	6	24	75	12	
HPB230-120240-100-S12	6	24	100	12	

Unit (mm)

HPR435 | HP-MAX Radius End Mill 4-Flute 35°



CARBIDE MG | HP MAX | 4 | 35° Helix | CR ±0.01 D>6 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
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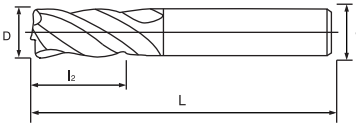
Model No.	Dia of Mill	Cormer R	Length of Cut	Overall Length	Shank Dia
	D	R	l2	L	d
HPR435-010R0.2-050-S04	1	0.2	3	50	4
HPR435-020R0.2-050-S04	2	0.2	6	50	4
HPR435-030R0.2-050-S04	3	0.2	8	50	4
HPR435-030R0.5-050-S04	3	0.5	8	50	4
HPR435-040R0.2-050-S04	4	0.2	11	50	4
HPR435-040R0.5-050-S04	4	0.5	11	50	4
HPR435-060R0.2-050-S06	6	0.2	16	50	6
HPR435-060R0.5-050-S06	6	0.5	16	50	6
HPR435-060R1.0-050-S06	6	1	16	50	6
HPR435-060R0.5-075-S06	6	0.5	16	75	6
HPR435-060R1.0-075-S06	6	1	16	75	6
HPR435-060R0.5-100-S06	6	0.5	16	100	6
HPR435-060R1.0-100-S06	6	1	16	100	6
HPR435-080R0.5-060-S08	8	0.5	20	60	8
HPR435-080R1.0-060-S08	8	1	20	60	8
HPR435-080R0.5-075-S08	8	0.5	20	75	8
HPR435-080R1.0-075-S08	8	1	20	75	8
HPR435-080R0.5-100-S08	8	0.5	20	100	8
HPR435-080R1.0-100-S08	8	1	20	100	8
HPR435-100R0.5-075-S10	10	0.5	25	75	10
HPR435-100R1.0-075-S10	10	1	25	75	10
HPR435-100R0.5-100-S10	10	0.5	25	100	10
HPR435-100R1.0-100-S10	10	1	25	100	10
HPR435-120R0.5-075-S12	12	0.5	30	75	12
HPR435-120R1.0-075-S12	12	1	30	75	12
HPR435-120R0.5-100-S12	12	0.5	30	100	12
HPR435-120R1.0-100-S12	12	1	30	100	12

Unit (mm)

HPE435 | HP-MAX Flat End Mill 4-Flute 35°



CARBIDE MG | HP MAX | 4 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
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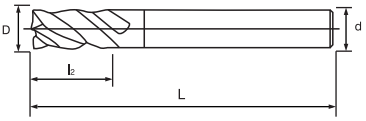
Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia	
	D	l_2	L	d	
HPE435-010030-050-S04	1.0	3	50	4	
HPE435-015040-050-S04	1.5	4	50	4	
HPE435-020060-050-S04	2	6	50	4	
HPE435-025070-050-S04	2.5	7	50	4	
HPE435-030090-050-S04	3	9	50	4	
HPE435-030090-050-S03	3	9	50	3	
HPE435-040110-050-S04	4	11	50	4	
HPE435-050130-050-S06	5	13	50	6	
HPE435-060160-050-S06	6	16	50	6	
HPE435-080200-060-S08	8	20	60	8	
HPE435-100250-075-S10	10	25	75	10	
HPE435-120300-075-S12	12	30	75	12	
HPE435-140350-100-S14	14	35	100	14	
HPE435-160400-100-S16	16	40	100	16	
HPE435-180450-100-S18	18	45	100	18	
HPE435-200500-100-S20	20	50	100	20	

Unit (mm)

HPEL435 | **HP-MAX** Long Flute Flat End Mill 4-Flute 35°



CARBIDE MG | HP MAX | 4 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

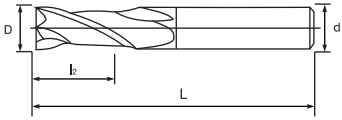
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	–	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HPEL435-030090-075-S04	3	9	75	4
HPEL435-040120-075-S04	4	12	75	4
HPEL435-030120-100-S04	3	12	100	4
HPEL435-040160-100-S04	4	16	100	4
HPEL435-050150-075-S06	5	15	75	6
HPEL435-060180-075-S06	6	18	75	6
HPEL435-050200-100-S06	5	20	100	6
HPEL435-060240-100-S06	6	24	100	6
HPEL435-080240-075-S08	8	24	75	8
HPEL435-080320-100-S08	8	32	100	8
HPEL435-100400-100-S10	10	40	100	10
HPEL435-120480-100-S12	12	48	100	12

Unit (mm)

HPE235 | HP-MAX Flat End Mill 2-Flute 35°



CARBIDE MG | HP MAX | 2 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

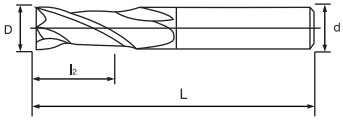
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL										
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC				
○	○	○	●	–	–	–	–	–	○	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HPE235-010030-050-S04	1.0	3	50	4
HPE235-015040-050-S04	1.5	4	50	4
HPE235-020060-050-S04	2	6	50	4
HPE235-025070-050-S04	2.5	7	50	4
HPE235-030090-050-S03	3	9	50	3
HPE235-030090-050-S04	3	9	50	4
HPE235-040110-050-S04	4	11	50	4
HPE235-050130-050-S06	5	13	50	6
HPE235-060160-050-S06	6	16	50	6
HPE235-080200-060-S08	8	20	60	8
HPE235-100250-075-S10	10	25	75	10
HPE235-120300-075-S12	12	30	75	12
HPE235-140350-100-S14	14	35	100	14
HPE235-160400-100-S16	16	40	100	16
HPE235-180450-100-S18	18	45	100	18
HPE235-200500-100-S20	20	50	100	20

Unit (mm)

HPEL235 | **HP-MAX** Long Flute Flat End Mill 2-Flute 35°



CARBIDE MG | HP MAX | 2 | 35° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

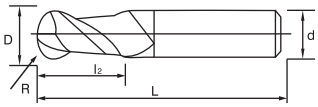
* Applicable Work Material (●Most Suitable, ○Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	–	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HPEL235-030090-075-S04	3	9	75	4
HPEL235-040120-075-S04	4	12	75	4
HPEL235-030120-100-S04	3	12	100	4
HPEL235-040160-100-S04	4	16	100	4
HPEL235-050150-075-S06	5	15	75	6
HPEL235-060180-075-S06	6	18	75	6
HPEL235-050200-100-S06	5	20	100	6
HPEL235-060240-100-S06	6	24	100	6
HPEL235-080240-075-S08	8	24	75	8
HPEL235-080320-100-S08	8	32	100	8
HPEL235-100400-100-S10	10	40	100	10
HPEL235-120480-100-S12	12	48	100	12

Unit (mm)

HMB230 | HM-MAX Ball End Mill 2-Flute 30°



CARBIDE SUPER | HM MAX | 2 | 30° Helix | R ±0.005 D≤6 | R ±0.01 D>6 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

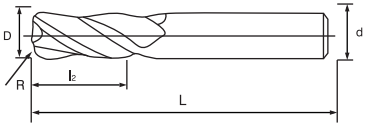
* Applicable Work Material (○ Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	R	l_2	L	d
HMB230-010020-050-S04	0.5	2	50	4
HMB230-015030-050-S04	0.75	3	50	4
HMB230-020040-050-S04	1	4	50	4
HMB230-030060-050-S04	1.5	6	50	4
HMB230-030060-050-S04	1.5	6	50	4
HMB230-040080-050-S04	2	8	50	4
HMB230-040080-050-S06	2	8	50	6
HMB230-050100-050-S06	2.5	10	50	6
HMB230-060120-050-S06	3	12	50	6
HMB230-060120-075-S06	3	12	75	6
HMB230-060120-100-S06	3	12	100	6
HMB230-080160-060-S08	4	16	60	8
HMB230-080160-075-S08	4	16	75	8
HMB230-080160-100-S08	4	16	100	8
HMB230-100200-075-S10	5	20	75	10
HMB230-100200-100-S10	5	20	100	10
HMB230-120240-075-S12	6	24	75	12
HMB230-120240-100-S12	6	24	100	12

Unit (mm)

HMR435 | HM-MAX Radius End Mill 4-Flute 35°



CARBIDE SUPER | HM MAX | 4 | 35° Helix | CR ±0.01 D>6 | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

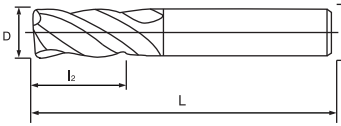
* Applicable Work Material (●Most Suitable, ○Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC	–	○	–	–	–
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Cormer R	Length of Cut	Overall Length	Shank Dia
	D	R	l2	L	d
HMR435-010R0.2-050-S04	1	0.2	3	50	4
HMR435-020R0.2-050-S04	2	0.2	6	50	4
HMR435-030R0.2-050-S04	3	0.2	8	50	4
HMR435-030R0.5-050-S04	3	0.5	8	50	4
HMR435-040R0.2-050-S04	4	0.2	11	50	4
HMR435-040R0.5-050-S04	4	0.5	11	50	4
HMR435-060R0.2-050-S06	6	0.2	16	50	6
HMR435-060R0.5-050-S06	6	0.5	16	50	6
HMR435-060R1.0-050-S06	6	1	16	50	6
HMR435-060R0.5-075-S06	6	0.5	16	75	6
HMR435-060R1.0-075-S06	6	1	16	75	6
HMR435-060R0.5-100-S06	6	0.5	16	100	6
HMR435-060R1.0-100-S06	6	1	16	100	6
HMR435-080R0.5-060-S08	8	0.5	20	60	8
HMR435-080R1.0-060-S08	8	1	20	60	8
HMR435-080R0.5-075-S08	8	0.5	20	75	8
HMR435-080R1.0-075-S08	8	1	20	75	8
HMR435-080R0.5-100-S08	8	0.5	20	100	8
HMR435-080R1.0-100-S08	8	1	20	100	8
HMR435-100R0.5-075-S10	10	0.5	25	75	10
HMR435-100R1.0-075-S10	10	1	25	75	10
HMR435-100R0.5-100-S10	10	0.5	25	100	10
HMR435-100R1.0-100-S10	10	1	25	100	10
HMR435-120R0.5-075-S12	12	0.5	30	75	12
HMR435-120R1.0-075-S12	12	1	30	75	12
HMR435-120R0.5-100-S12	12	0.5	30	100	12
HMR435-120R1.0-100-S12	12	1	30	100	12

Unit (mm)

HME435 | HM-MAX Flat End Mill 4-Flute 35°



CARBIDE SUPER | HM MAX | 4 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

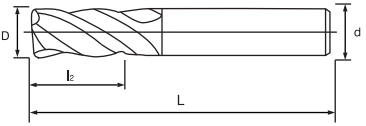
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	ength of Cut	Overall Length	Shank Dia	
	D	l2	L	d	
HME435-010030-050-S04	1.0	3	50	4	
HME435-015040-050-S04	1.5	4	50	4	
HME435-020060-050-S04	2	6	50	4	
HME435-025070-050-S04	2.5	7	50	4	
HME435-030090-050-S03	3	9	50	3	
HME435-030090-050-S04	3	9	50	4	
HME435-040110-050-S04	4	11	50	4	
HME435-050130-050-S06	5	13	50	6	
HME435-060160-050-S06	6	16	50	6	
HME435-080200-060-S08	8	20	60	8	
HME435-100250-075-S10	10	25	75	10	
HME435-120300-075-S12	12	30	75	12	
HME435-140350-100-S14	14	35	100	14	
HME435-160400-100-S16	16	40	100	16	
HME435-180450-100-S18	18	45	100	18	
HME435-200500-100-S20	20	50	100	20	

Unit (mm)

HMEL435 | HM-MAX Long Flute Flat End Mill 4-Flute 35°



CARBIDE SUPER | HM MAX | 4 | 35° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

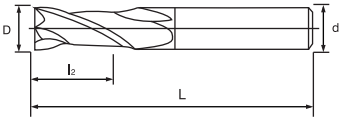
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l2	L	d
HMEL435-030090-075-S04	3	9	75	4
HMEL435-040120-075-S04	4	12	75	4
HMEL435-030120-100-S04	3	12	100	4
HMEL435-040160-100-S04	4	16	100	4
HMEL435-050150-075-S06	5	15	75	6
HMEL435-060180-075-S06	6	18	75	6
HMEL435-050200-100-S06	5	20	100	6
HMEL435-060240-100-S06	6	24	100	6
HMEL435-080240-075-S08	8	24	75	8
HMEL435-080320-100-S08	8	32	100	8
HMEL435-100400-100-S10	10	40	100	10
HMEL435-120480-100-S12	12	48	100	12

Unit (mm)

HME235 | HM-MAX Flat End Mill 2-Flute 35°



CARBIDE SUPER | HM MAX | 2 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.0 D≥6

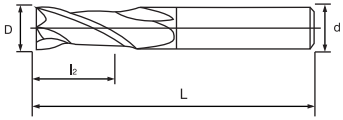
* Applicable Work Material (○ Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HME235-010030-050-S04	1.0	3	50	4
HME235-015040-050-S04	1.5	4	50	4
HME235-020060-050-S04	2	6	50	4
HME235-025070-050-S04	2.5	7	50	4
HME235-030090-050-S03	3	9	50	3
HME235-030090-050-S04	3	9	50	4
HME235-040110-050-S04	4	11	50	4
HME235-050130-050-S06	5	13	50	6
HME235-060160-050-S06	6	16	50	6
HME235-080200-060-S08	8	20	60	8
HME235-100250-075-S10	10	25	75	10
HME235-120300-075-S12	12	30	75	12
HME235-140350-100-S14	14	35	100	14
HME235-160400-100-S16	16	40	100	16
HME235-180450-100-S18	18	45	100	18
HME235-200500-100-S20	20	50	100	20

Unit (mm)

HMEL235 | HM-MAX Long Flute Flat End Mill 2-Flute 35°



CARBIDE SUPER | HM MAX | 2 | 35° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

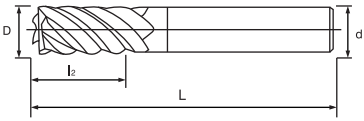
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HMEL235-030090-075-S04	3	9	75	4
HMEL235-040120-075-S04	4	12	75	4
HMEL235-030120-100-S04	3	12	100	4
HMEL235-040160-100-S04	4	16	100	4
HMEL235-050150-075-S06	5	15	75	6
HMEL235-060180-075-S06	6	18	75	6
HMEL235-050200-100-S06	5	20	100	6
HMEL235-060240-100-S06	6	24	100	6
HMEL235-080240-075-S08	8	24	75	8
HMEL235-080320-100-S08	8	32	100	8
HMEL235-100400-100-S10	10	40	100	10
HMEL235-120480-100-S12	12	48	100	12

Unit (mm)

HME645 | HM-MAX Flat End Mill 6-Flute 45°



CARBIDE SUPER | HM MAX | 6 | 45° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

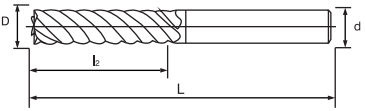
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL										
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	●	●	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l2	L	d
HME645-060180-060-S06	6	18	50	6
HME645-080200-060-S08	8	20	60	8
HME645-100300-075-S10	10	30	75	10
HME645-120320-075-S12	12	32	75	12
HME645-160400-100-S16	16	40	100	16
HME645-200450-100-S20	20	45	100	20

Unit (mm)

HMEL645 | HM-MAX Long Flute Flat End Mill 6-Flute 45°



CARBIDE SUPER | HM MAX | 6 | 45° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

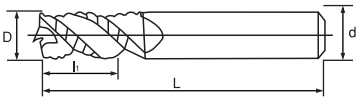
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HMEL645-060240-075-S06	6	24	75	6
HMEL645-060240-100-S06	6	24	100	6
HMEL645-080320-075-S08	8	32	75	8
HMEL645-080320-100-S06	8	32	100	8
HMEL645-100400-100-S10	10	40	100	10
HMEL645-120450-100-S12	12	45	100	12
HMEL645-160640-150-S16	16	64	150	16
HMEL645-200750-150-S20	20	75	150	20

Unit (mm)

HMRE430 | HM-MAX Roughing Flat End Mill 4-Flute 30°



CARBIDE SUPER | HM MAX | 4 | 30° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

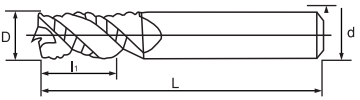
* Applicable Work Material (●Most Suitable, ○Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HMRE430-030080-050-S04	3	8	50	4
HMRE430-040100-050-S04	4	10	50	4
HMRE430-060150-060-S06	6	15	50	6
HMRE430-080200-060-S08	8	20	60	8
HMRE430-100250-075-S10	10	25	75	10
HMRE430-120300-075-S12	12	30	75	12
HMRE430-160400-100-S16	16	40	100	16
HMRE430-200500-100-S20	20	50	100	20

Unit (mm)

HMREL430 | HM-MAX Long Flute Roughing Flat End Mill 4-Flute 30°



CARBIDE SUPER | HM MAX | 4 | 30° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

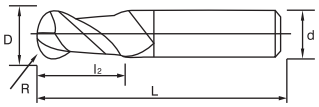
* Applicable Work Material (●Most Suitable, ○Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HMREL430-060240-100-S06	6	24	100	6
HMREL430-080320-100-S08	8	32	100	8
HMREL430-100400-100-S10	10	40	100	10
HMREL430-120480-100-S12	12	48	100	12
HMREL430-160650-150-S16	16	65	150	16
HMREL430-200800-150-S20	20	80	150	20

Unit (mm)

HYB230 | HY-MAX Ball End Mill 2-Flute 30°



CARBIDE NANO | HY MAX | 2 | 30° Helix | R ±0.005 | D 0/-0.015

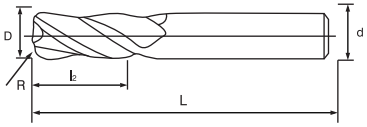
* Applicable Work Material (○ Most Suitable, ○ Applicable)

WORK MATERIAL										
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC					
○	○	○	○	○	○	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	R	l_2	L	d
HYB230-010020-050-S04	0.5	2	50	4
HYB230-015030-050-S04	0.75	3	50	4
HYB230-020040-050-S04	1	4	50	4
HYB230-030060-050-S04	1.5	6	50	4
HYB230-030060-050-S04	1.5	6	50	4
HYB230-040080-050-S04	2	8	50	4
HYB230-040080-050-S06	2	8	50	6
HYB230-050100-050-S06	2.5	10	50	6
HYB230-060120-050-S06	3	12	50	6
HYB230-060120-075-S06	3	12	75	6
HVB230-060120-100-S06	3	12	100	6
HYB230-080160-060-S08	4	16	60	8
HYB230-080160-075-S08	4	16	75	8
HYB230-080160-100-S08	4	16	100	8
HYB230-100200-075-S10	5	20	75	10
HYB230-100200-100-S10	5	20	100	10
HYB230-120240-075-S12	6	24	75	12
HYB230-120240-100-S12	6	24	100	12

Unit (mm)

HYR435 | HY-MAX Rudius End Mill 4-Flute 35°



CARBIDE NANO | HY MAX | 4 | 35° Helix | CR ±0.01 | D 0/-0.015 | D 0/-0.02

D>6 D≤5 D≥6

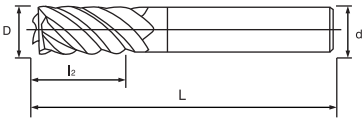
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL										
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Cormer R	Length of Cut	Overall Length	Shank Dia
	D	R	l_2	L	d
HYR435-010R0.2-050-S04	1	0.2	3	50	4
HYR435-020R0.2-050-S04	2	0.2	6	50	4
HYR435-030R0.2-050-S04	3	0.2	8	50	4
HYR435-030R0.5-050-S04	3	0.5	8	50	4
HYR435-040R0.2-050-S04	4	0.2	11	50	4
HYR435-040R0.5-050-S04	4	0.5	11	50	4
HYR435-060R0.2-050-S06	6	0.2	16	50	6
HYR435-060R0.5-050-S06	6	0.5	16	50	6
HYR435-060R1.0-050-S06	6	1	16	50	6
HYR435-060R0.5-075-S06	6	0.5	16	75	6
HYR435-060R1.0-075-S06	6	1	16	75	6
HYR435-060R0.5-100-S06	6	0.5	16	100	6
HYR435-060R1.0-100-S06	6	1	16	100	6
HYR435-080R0.5-060-S08	8	0.5	20	60	8
HYR435-080R1.0-060-S08	8	1	20	60	8
HYR435-080R0.5-075-S08	8	0.5	20	75	8
HYR435-080R1.0-075-S08	8	1	20	75	8
HYR435-080R0.5-100-S08	8	0.5	20	100	8
HYR435-080R1.0-100-S08	8	1	20	100	8
HYR435-100R0.5-075-S10	10	0.5	25	75	10
HYR435-100R1.0-075-S10	10	1	25	75	10
HYR435-100R0.5-100-S10	10	0.5	25	100	10
HYR435-100R1.0-100-S10	10	1	25	100	10
HYR435-120R0.5-075-S12	12	0.5	30	75	12
HYR435-120R1.0-075-S12	12	1	30	75	12
HYR435-120R0.5-100-S12	12	0.5	30	100	12
HYR435-120R1.0-100-S12	12	1	30	100	12

Unit (mm)

HYE645 | HY-MAX Flat End Mill 6-Flute 35°



CARBIDE SUPER | HY MAX | 6 | 35° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

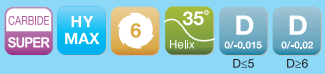
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

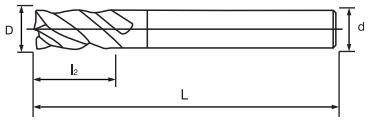
Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l2	L	d
HYE645-060150-060-S06	6	15	60	6
HYE645-080200-060-S06	8	20	60	6
HYE645-100250-075-S06	10	25	75	6
HYE645-120300-075-S06	12	30	75	6
HYE645-140350-100-S06	14	35	100	6
HYE645-160400-100-S06	16	40	100	6
HYE645-200500-100-S06	20	50	100	6

Unit (mm)

HYE645 | **HY-MAX** Flat End Mill 6-Flute 35°



HYE435 | HY-MAX Flat End Mill 4-Flute 35°



CARBIDE NANO | HY MAX | 4 | 35° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

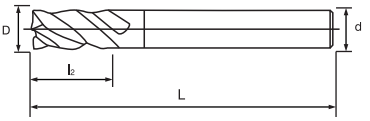
* Applicable Work Material (○ Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	○	○	○	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HYE435-010030-050-S04	1.0	3	50	4
HYE435-015040-050-S04	1.5	4	50	4
HYE435-020060-050-S04	2	6	50	4
HYE435-025070-050-S04	2.5	7	50	4
HYE435-030090-050-S04	3	9	50	4
HYE435-030090-050-S03	3	9	50	3
HYE435-040110-050-S04	4	11	50	4
HYE435-050130-050-S06	5	13	50	6
HYE435-060160-050-S06	6	16	50	6
HYE435-080200-060-S08	8	20	60	8
HYE435-100250-075-S10	10	25	75	10
HYE435-120300-075-S12	12	30	75	12

Unit (mm)

HYEL435 | HM-MAX Long Flute Flat End Mill 4-Flute 35°



CARBIDE NANO | HY MAX | 4 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

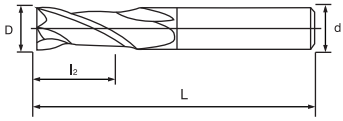
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l2	L	d
HYEL435-030090-075-S04	3	9	75	4
HYEL435-040120-075-S04	4	12	75	4
HYEL435-030120-100-S04	3	12	100	4
HYEL435-040160-100-S04	4	16	100	4
HYEL435-050150-075-S06	5	15	75	6
HYEL435-060180-075-S06	6	18	75	6
HYEL435-050200-100-S06	5	20	100	6
HYEL435-060240-100-S06	6	24	100	6
HYEL435-080240-075-S08	8	24	75	8
HYEL435-080320-100-S08	8	32	100	8
HYEL435-100400-100-S10	10	40	100	10
HYEL435-120480-100-S12	12	48	100	12

Unit (mm)

HYE235 | HY-MAX Flat End Mill 2-Flute 35°



CARBIDE NANO | HY MAX | 2 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

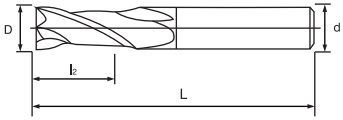
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL										
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HYE235-010030-050-S04	1.0	3	50	4
HYE235-015040-050-S04	1.5	4	50	4
HYE235-020060-050-S04	2	6	50	4
HYE235-025070-050-S04	2.5	7	50	4
HYE235-030090-050-S03	3	9	50	3
HYE235-030090-050-S04	3	9	50	4
HYE235-040110-050-S04	4	11	50	4
HYE235-050130-050-S06	5	13	50	6
HYE235-060160-050-S06	6	16	50	6
HYE235-080200-060-S08	8	20	60	8
HYE235-100250-075-S10	10	25	75	10
HYE235-120300-075-S12	12	30	75	12

Unit (mm)

HYEL235 | HM-MAX Long Flute Flat End Mill 2-Flute 35°



CARBIDE NANO | HY MAX | 2 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

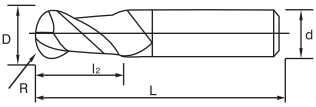
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l2	L	d
HYEL235-030090-075-S04	3	9	75	4
HYEL235-040120-075-S04	4	12	75	4
HYEL235-030120-100-S04	3	12	100	4
HYEL235-040160-100-S04	4	16	100	4
HYEL235-050150-075-S06	5	15	75	6
HYEL235-060180-075-S06	6	18	75	6
HYEL235-050200-100-S06	5	20	100	6
HYEL235-060240-100-S06	6	24	100	6
HYEL235-080240-075-S08	8	24	75	8
HYEL235-080320-100-S08	8	32	100	8
HYEL235-100400-100-S10	10	40	100	10
HYEL235-120480-100-S12	12	48	100	12

Unit (mm)

HSB230 | HS-MAX Ball End Mill 2-Flute 30°



CARBIDE SUPER | HS MAX | 2 | 30° Helix | R ±0.005 D≤6 | R ±0.01 D>6 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

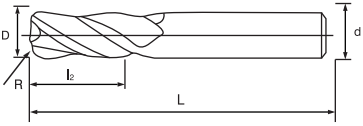
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC					
○	○	●	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	R	l_2	L	d
HSB230-010020-050-S04	0.5	2	50	4
HSB230-015030-050-S04	0.75	3	50	4
HSB230-020040-050-S04	1	4	50	4
HSB230-030060-050-S04	1.5	6	50	4
HSB230-030060-050-S04	1.5	6	50	4
HSB230-040080-050-S04	2	8	50	4
HSB230-040080-050-S06	2	8	50	6
HSB230-050100-050-S06	2.5	10	50	6
HSB230-060120-050-S06	3	12	50	6
HSB230-060120-075-S06	3	12	75	6
HSB230-060120-100-S06	3	12	100	6
HSB230-080160-060-S08	4	16	60	8
HSB230-080160-075-S08	4	16	75	8
HSB230-080160-100-S08	4	16	100	8
HSB230-100200-075-S10	5	20	75	10
HSB230-100200-100-S10	5	20	100	10
HSB230-120240-075-S12	6	24	75	12
HSB230-120240-100-S12	6	24	100	12

Unit (mm)

HSR435 | HS-MAX Rudius End Mill 4-Flute 35°



CARBIDE SUPER | HS MAX | 4 | 35° Helix | CR ±0.01 D>6 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

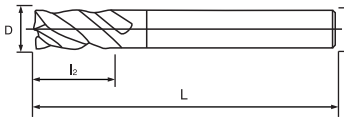
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	●	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Cormer R	Length of Cut	Overall Length	Shank Dia
	D	R	l2	L	d
HSR435-010R0.2-050-S04	1	0.2	3	50	4
HSR435-020R0.2-050-S04	2	0.2	6	50	4
HSR435-030R0.2-050-S04	3	0.2	8	50	4
HSR435-030R0.5-050-S04	3	0.5	8	50	4
HSR435-040R0.2-050-S04	4	0.2	11	50	4
HSR435-040R0.5-050-S04	4	0.5	11	50	4
HSR435-060R0.2-050-S06	6	0.2	16	50	6
HSR435-060R0.5-050-S06	6	0.5	16	50	6
HSR435-060R1.0-050-S06	6	1	16	50	6
HSR435-060R0.5-075-S06	6	0.5	16	75	6
HSR435-060R1.0-075-S06	6	1	16	75	6
HSR435-060R0.5-100-S06	6	0.5	16	100	6
HSR435-060R1.0-100-S06	6	1	16	100	6
HSR435-080R0.5-060-S08	8	0.5	20	60	8
HSR435-080R1.0-060-S08	8	1	20	60	8
HSR435-080R0.5-075-S08	8	0.5	20	75	8
HSR435-080R1.0-075-S08	8	1	20	75	8
HSR435-080R0.5-100-S08	8	0.5	20	100	8
HSR435-080R1.0-100-S08	8	1	20	100	8
HSR435-100R0.5-075-S10	10	0.5	25	75	10
HSR435-100R1.0-075-S10	10	1	25	75	10
HSR435-100R0.5-100-S10	10	0.5	25	100	10
HSR435-100R1.0-100-S10	10	1	25	100	10
HSR435-120R0.5-075-S12	12	0.5	30	75	12
HSR435-120R1.0-075-S12	12	1	30	75	12
HSR435-120R0.5-100-S12	12	0.5	30	100	12
HSR435-120R1.0-100-S12	12	1	30	100	12

Unit (mm)

HSE435 | HS-MAX Flat End Mill 4-Flute 35°



CARBIDE SUPER | HS MAX | 4 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

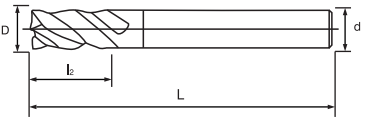
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	●	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HSE435-010030-050-S04	1.0	3	50	4
HSE435-015040-050-S04	1.5	4	50	4
HSE435-020060-050-S04	2	6	50	4
HSE435-025070-050-S04	2.5	7	50	4
HSE435-030090-050-S04	3	9	50	4
HSE435-030090-050-S03	3	9	50	3
HSE435-040110-050-S04	4	11	50	4
HSE435-050130-050-S06	5	13	50	6
HSE435-060160-050-S06	6	16	50	6
HSE435-080200-060-S08	8	20	60	8
HSE435-100250-075-S10	10	25	75	10
HSE435-120300-075-S12	12	30	75	12
HSE435-140350-100-S14	14	35	100	14
HSE435-160400-100-S16	16	40	100	16
HSE435-180450-100-S18	18	45	100	18
HSE435-200500-100-S20	20	50	100	20

Unit (mm)

HSEL435 | HS-MAX Long Flute Flat End Mill 4-Flute 35°



CARBIDE SUPER | HS MAX | 4 | 35° Helix | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

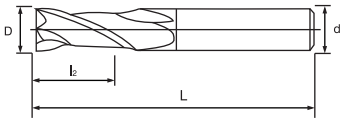
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	●	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l_2	L	d
HSEL435-030090-075-S04	3	9	75	4
HSEL435-040120-075-S04	4	12	75	4
HSEL435-030120-100-S04	3	12	100	4
HSEL435-040160-100-S04	4	16	100	4
HSEL435-050150-075-S06	5	15	75	6
HSEL435-060180-075-S06	6	18	75	6
HSEL435-050200-100-S06	5	20	100	6
HSEL435-060240-100-S06	6	24	100	6
HSEL435-080240-075-S08	8	24	75	8
HSEL435-080320-100-S08	8	32	100	8
HSEL435-100400-100-S10	10	40	100	10
HSEL435-120480-100-S12	12	48	100	12

Unit (mm)

HSE235 | HS-MAX Flat End Mill 2-Flute 35°



CARBIDE SUPER | HS MAX | 2 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

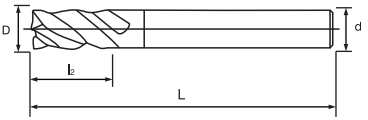
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	●	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia	
	D	l_2	L	d	
HSE235-010030-050-S04	1.0	3	50	4	
HSE235-015040-050-S04	1.5	4	50	4	
HSE235-020060-050-S04	2	6	50	4	
HSE235-025070-050-S04	2.5	7	50	4	
HSE235-030090-050-S04	3	9	50	4	
HSE235-030090-050-S03	3	9	50	3	
HSE235-040110-050-S04	4	11	50	4	
HSE235-050130-050-S06	5	13	50	6	
HSE235-060160-050-S06	6	16	50	6	
HSE235-080200-060-S08	8	20	60	8	
HSE235-100250-075-S10	10	25	75	10	
HSE235-120300-075-S12	12	30	75	12	
HSE235-140350-100-S14	14	35	100	14	
HSE235-160400-100-S16	16	40	100	16	
HSE235-180450-100-S18	18	45	100	18	
HSE435-200500-100-S20	20	50	100	20	

Unit (mm)

HSEL235 | HS-MAX Long Flute Flat End Mill 2-Flute 35°



CARBIDE SUPER | HS MAX | 2 | 35° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

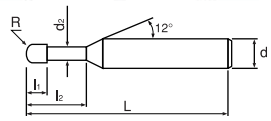
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	●	○	○	–	–	–	–	○	–	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Dia
	D	l2	L	d
HSEL235-030090-075-S04	3	9	75	4
HSEL235-040120-075-S04	4	12	75	4
HSEL235-030120-100-S04	3	12	100	4
HSEL235-040160-100-S04	4	16	100	4
HSEL235-050150-075-S06	5	15	75	6
HSEL235-060180-075-S06	6	18	75	6
HSEL235-050200-100-S06	5	20	100	6
HSEL235-060240-100-S06	6	24	100	6
HSEL235-080240-075-S08	8	24	75	8
HSEL235-080320-100-S08	8	32	100	8
HSEL235-100400-100-S10	10	40	100	10
HSEL235-120480-100-S12	12	48	100	12

Unit (mm)

HRB230 | HR-MAX Rib Ball End Mill 2-Flute 30°



CARBIDE NANO | HR MAX | 2 | 30° Helix | R ±0.005 | D 0/-0.015

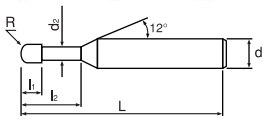
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Radius of Ball Nose	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	R	l_2	l_1	d_2	L	d
HRB230-020010-050-S04	R0.1	0.2	1	0.18	50	4
HRB230-020015-050-S04	R0.1	0.2	1.5	0.18	50	4
HRB230-020020-050-S04	R0.1	0.2	2	0.18	50	4
HRB230-030010-050-S04	R0.15	0.3	1	0.27	50	4
HRB230-030020-050-S04	R0.15	0.3	2	0.27	50	4
HRB230-030030-050-S04	R0.15	0.3	3	0.27	50	4
HRB230-040010-050-S04	R0.2	0.4	1	0.37	50	4
HRB230-040020-050-S04	R0.2	0.4	2	0.37	50	4
HRB230-040040-050-S04	R0.2	0.4	4	0.37	50	4
HRB230-040060-050-S04	R0.2	0.4	6	0.37	50	4
HRB230-050020-050-S04	R0.25	0.5	2	0.46	50	4
HRB230-050040-050-S04	R0.25	0.5	4	0.46	50	4
HRB230-050060-050-S04	R0.25	0.5	6	0.46	50	4
HRB230-050080-050-S04	R0.25	0.5	8	0.46	50	4
HRB230-060020-050-S04	R0.3	0.6	2	0.55	50	4
HRB230-060030-050-S04	R0.3	0.6	3	0.55	50	4
HRB230-060040-050-S04	R0.3	0.6	4	0.55	50	4
HRB230-060060-050-S04	R0.3	0.6	6	0.55	50	4
HRB230-060080-050-S04	R0.3	0.6	8	0.55	50	4
HRB230-080020-050-S04	R0.4	0.8	2	0.75	50	4
HRB230-080040-050-S04	R0.4	0.8	4	0.75	50	4
HRB230-080060-050-S04	R0.4	0.8	6	0.75	50	4
HRB230-080080-050-S04	R0.4	0.8	8	0.75	50	4
HRB230-080100-050-S04	R0.4	0.8	10	0.75	50	4
HRB230-100040-050-S04	R0.5	1.0	4	0.95	50	4
HRB230-100060-050-S04	R0.5	1.0	6	0.95	50	4
HRB230-100080-050-S04	R0.5	1.0	8	0.95	50	4
HRB230-100100-050-S04	R0.5	1.0	10	0.95	50	4
HRB230-100120-050-S04	R0.5	1.0	12	0.95	50	4
HRB230-100160-050-S04	R0.5	1.0	16	0.95	50	4

Unit (mm)

HRB230 | HR-MAX Rib Ball End Mill 2-Flute 30°



CARBIDE NANO | HR MAX | 2 | 30° Helix | R ±0.005 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

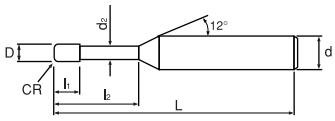
* Applicable Work Material (○ Most Suitable, ◯ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
◯	◯	◯	○	○	○	–	–	–	◯	–	–	–

Model No.	Radius of Ball Nose R	Effective Length l_2	Length of Cut l_1	Neck Dia d_2	Overall Length L	Shank Dia d
HRB230-120060-050-S04	R0.6	1.2	6	1.15	50	4
HRB230-120080-050-S04	R0.6	1.2	8	1.15	50	4
HRB230-120100-050-S04	R0.6	1.2	10	1.15	50	4
HRB230-120120-050-S04	R0.6	1.2	12	1.15	50	4
HRB230-150060-050-S04	R0.75	1.5	6	1.45	50	4
HRB230-150080-050-S04	R0.75	1.5	8	1.45	50	4
HRB230-150100-050-S04	R0.75	1.5	10	1.45	50	4
HRB230-150120-050-S04	R0.75	1.5	12	1.45	50	4
HRB230-150160-050-S04	R0.75	1.5	16	1.45	50	4
HRB230-150200-050-S04	R0.75	1.5	20	1.45	50	4
HRB230-200080-050-S04	R1.0	2.0	8	1.95	50	4
HRB230-200100-050-S04	R1.0	2.0	10	1.95	50	4
HRB230-200120-050-S04	R1.0	2.0	12	1.95	50	4
HRB230-200160-050-S04	R1.0	2.0	16	1.95	50	4
HRB230-200180-050-S04	R1.0	2.0	18	1.95	50	4
HRB230-200200-050-S04	R1.0	2.0	20	1.95	50	4
HRB230-200220-050-S04	R1.0	2.0	22	1.95	50	4
HRB230-300120-050-S06	R1.5	3.0	12	2.85	50	6
HRB230-300160-050-S06	R1.5	3.0	16	2.85	50	6
HRB230-300200-050-S06	R1.5	3.0	20	2.85	50	6
HRB230-300260-070-S06	R1.5	3.0	26	2.85	70	6
HRB230-300300-070-S06	R1.5	3.0	30	2.85	70	6
HRB230-400160-050-S06	R2.0	4.0	16	3.85	50	6
HRB230-400200-050-S06	R2.0	4.0	20	3.85	50	6
HRB230-400260-070-S06	R2.0	4.0	26	3.85	70	6
HRB230-400300-070-S06	R2.0	4.0	30	3.85	70	6

Unit (mm)

HRR230 HR-MAX Rib Radius End Mill 2-Flute 30°



CARBIDE NANO | HR MAX | 2 | 30° Helix | CR ±0.01 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

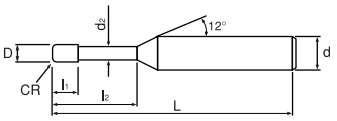
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Coner Radius	Effective Length	Length of Cut	Overall Length	Shank Dia
	D	CR	l_2	l_1	L	d
HRR230-005R0.05020-050-S04	0.5	R0.05	2	0.7	50	4
HRR230-005R0.05040-050-S04	0.5	R0.05	4	0.7	50	4
HRR230-005R0.05060-050-S04	0.5	R0.05	6	0.7	50	4
HRR230-006R0.05020-050-S04	0.6	R0.05	2	0.9	50	4
HRR230-006R0.05040-050-S04	0.6	R0.05	4	0.9	50	4
HRR230-006R0.05060-050-S04	0.6	R0.05	6	0.9	50	4
HRR230-008R0.05040-050-S04	0.8	R0.05	4	1.2	50	4
HRR230-008R0.05060-050-S04	0.8	R0.05	6	1.2	50	4
HRR230-010R0.1040-050-S04	1.0	R0.1	4	1.5	50	4
HRR230-010R0.1060-050-S04	1.0	R0.1	6	1.5	50	4
HRR230-010R0.1080-050-S04	1.0	R0.1	8	1.5	50	4
HRR230-010R0.2040-050-S04	1.0	R0.2	4	1.5	50	4
HRR230-010R0.2060-050-S04	1.0	R0.2	6	1.5	50	4
HRR230-010R0.2080-050-S04	1.0	R0.2	8	1.5	50	4
HRR230-015R0.1060-050-S04	1.5	R0.1	6	2.3	50	4
HRR230-015R0.1080-050-S04	1.5	R0.1	8	2.3	50	4
HRR230-015R0.1100-050-S04	1.5	R0.1	10	2.3	50	4
HRR230-015R0.2060-050-S04	1.5	R0.2	6	2.3	50	4
HRR230-015R0.2080-050-S04	1.5	R0.2	8	2.3	50	4
HRR230-015R0.2100-050-S04	1.5	R0.2	10	2.3	50	4
HRR230-020R0.1080-050-S04	2.0	R0.1	8	3.0	50	4
HRR230-020R0.1100-050-S04	2.0	R0.1	10	3.0	50	4
HRR230-020R0.1120-050-S04	2.0	R0.1	12	3.0	50	4
HRR230-020R0.1160-050-S04	2.0	R0.1	16	3.0	50	4
HRR230-020R0.2080-050-S04	2.0	R0.2	8	3.0	50	4
HRR230-020R0.2100-050-S04	2.0	R0.2	10	3.0	50	4
HRR230-020R0.2120-050-S04	2.0	R0.2	12	3.0	50	4
HRR230-020R0.2160-050-S04	2.0	R0.2	16	3.0	50	4

Unit (mm)

HRR430 | HR-MAX Rib Radius End Mill 4-Flute 30°



CARBIDE NANO | HR MAX | 4 | 30° Helix | CR ±0.01 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

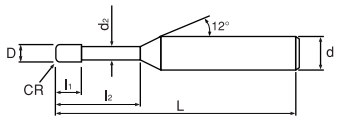
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels			Hardened Steels			Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC						
○	○	○	●	●	●	–	–		–	○	–	–	–

Model No.	Dia of Mill	Coner Radius	Effective Length	Length of Cut	Overall Length	Shank Dia
	D	CR	l_2	l_1	L	d
HRR430-010R0.1040-050-S04	1.0	R0.1	4	1.5	50	4
HRR430-010R0.1060-050-S04	1.0	R0.1	6	1.5	50	4
HRR430-010R0.1080-050-S04	1.0	R0.1	8	1.5	50	4
HRR430-010R0.2040-050-S04	1.0	R0.2	4	1.5	50	4
HRR430-010R0.2060-050-S04	1.0	R0.2	6	1.5	50	4
HRR430-010R0.2080-050-S04	1.0	R0.2	8	1.5	50	4
HRR430-015R0.1060-050-S04	1.5	R0.1	6	2.3	50	4
HRR430-015R0.1080-050-S04	1.5	R0.1	8	2.3	50	4
HRR430-015R0.1100-050-S04	1.5	R0.1	10	2.3	50	4
HRR430-015R0.2060-050-S04	1.5	R0.2	6	2.3	50	4
HRR430-015R0.2080-050-S04	1.5	R0.2	8	2.3	50	4
HRR430-015R0.2100-050-S04	1.5	R0.2	10	2.3	50	4
HRR430-020R0.1080-050-S04	2.0	R0.1	8	3.0	50	4
HRR430-020R0.1100-050-S04	2.0	R0.1	10	3.0	50	4
HRR430-020R0.1120-050-S04	2.0	R0.1	12	3.0	50	4
HRR430-020R0.1160-050-S04	2.0	R0.1	16	3.0	50	4
HRR430-020R0.2080-050-S04	2.0	R0.2	8	3.0	50	4
HRR430-020R0.2100-050-S04	2.0	R0.2	10	3.0	50	4
HRR430-020R0.2120-050-S04	2.0	R0.2	12	3.0	50	4
HRR430-020R0.2160-050-S04	2.0	R0.2	16	3.0	50	4

Unit (mm)

HRR430 | HR-MAX Rib Radius End Mill 4-Flute 30°



CARBIDE NANO | HR MAX | 4 | 30° Helix | CR ±0.01 | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

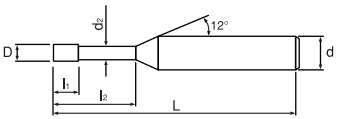
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Coner Radius	Effective Length	Length of Cut	Overall Length	Shank Dia
	D	CR	l_2	l_1	L	d
HRR430-030R0.2120-050-S06	3.0	R0.2	12	4.5	50	6
HRR430-030R0.2160-050-S06	3.0	R0.2	16	4.5	50	6
HRR430-030R0.2200-050-S06	3.0	R0.2	20	4.5	50	6
HRR430-030R0.2260-050-S06	3.0	R0.2	26	4.5	70	6
HRR430-030R0.2300-050-S06	3.0	R0.2	30	4.5	70	6
HRR430-030R0.3120-050-S06	3.0	R0.3	12	4.5	50	6
HRR430-030R0.3160-050-S06	3.0	R0.3	16	4.5	50	6
HRR430-030R0.3200-050-S06	3.0	R0.3	20	4.5	50	6
HRR430-030R0.3260-050-S06	3.0	R0.3	26	4.5	70	6
HRR430-030R0.3300-050-S06	3.0	R0.3	30	4.5	70	6
HRR430-030R0.5120-050-S06	3.0	R0.5	12	4.5	50	6
HRR430-030R0.5160-050-S06	3.0	R0.5	16	4.5	50	6
HRR430-030R0.5200-050-S06	3.0	R0.5	20	4.5	50	6
HRR430-030R0.5260-050-S06	3.0	R0.5	26	4.5	70	6
HRR430-030R0.5300-050-S06	3.0	R0.5	30	4.5	70	6
HRR430-040R0.2160-050-S06	4.0	R0.2	16	6	50	6
HRR430-040R0.2200-050-S06	4.0	R0.2	20	6	50	6
HRR430-040R0.2260-050-S06	4.0	R0.2	26	6	70	6
HRR430-040R0.2300-050-S06	4.0	R0.2	30	6	70	6
HRR430-040R0.3160-050-S06	4.0	R0.3	16	6	50	6
HRR430-040R0.3200-050-S06	4.0	R0.3	20	6	50	6
HRR430-040R0.3260-050-S06	4.0	R0.3	26	6	70	6
HRR430-040R0.3300-050-S06	4.0	R0.3	30	6	70	6
HRR430-040R0.5160-050-S06	4.0	R0.5	16	6	50	6
HRR430-040R0.5200-050-S06	4.0	R0.5	20	6	50	6
HRR430-040R0.5260-050-S06	4.0	R0.5	26	6	70	6
HRR430-040R0.5300-050-S06	4.0	R0.5	30	6	70	6

Unit (mm)

HRE230 | HR-MAX Rib Flat End Mill 2-Flute 30°



CARBIDE NANO | HR MAX | 2 | 30° Helix | D 0/-0.015

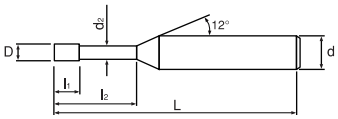
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	l_2	l_1	d_2	L	d
HRE230-010003-050-S04	0.1	-	0.3	-	50	4
HRE230-010003-050-S04	0.1	-	0.5	-	50	4
HRE230-020010-050-S04	0.2	1	0.3	0.18	50	4
HRE230-020015-050-S04	0.2	1.5	0.3	0.18	50	4
HRE230-020020-050-S04	0.2	2	0.3	0.18	50	4
HRE230-030010-050-S04	0.3	1	0.5	0.27	50	4
HRE230-030020-050-S04	0.3	2	0.5	0.27	50	4
HRE230-030030-050-S04	0.3	3	0.5	0.27	50	4
HRE230-040020-050-S04	0.4	2	0.6	0.37	50	4
HRE230-040040-050-S04	0.4	4	0.6	0.37	50	4
HRE230-040060-050-S04	0.4	6	0.6	0.37	50	4
HRE230-050020-050-S04	0.5	2	0.7	0.45	50	4
HRE230-050030-050-S04	0.5	3	0.7	0.45	50	4
HRE230-050040-050-S04	0.5	4	0.7	0.45	50	4
HRE230-050060-050-S04	0.5	6	0.7	0.45	50	4
HRE230-050080-050-S04	0.5	8	0.7	0.45	50	4
HRE230-060020-050-S04	0.6	2	0.9	0.55	50	4
HRE230-060030-050-S04	0.6	3	0.9	0.55	50	4
HRE230-060040-050-S04	0.6	4	0.9	0.55	50	4
HRE230-060060-050-S04	0.6	6	0.9	0.55	50	4
HRE230-060080-050-S04	0.6	8	0.9	0.55	50	4
HRE230-070040-050-S04	0.7	4	1.0	0.65	50	4
HRE230-070060-050-S04	0.7	6	1.0	0.65	50	4
HRE230-070080-050-S04	0.7	8	1.0	0.65	50	4
HRE230-070100-050-S04	0.7	10	1.0	0.65	50	4
HRE230-080040-050-S04	0.8	4	1.2	0.75	50	4
HRE230-080060-050-S04	0.8	6	1.2	0.75	50	4
HRE230-080080-050-S04	0.8	8	1.2	0.75	50	4
HRE230-080100-050-S04	0.8	10	1.2	0.75	50	4

Unit (mm)

HRE230 | HR-MAX Rib Flat End Mill 2-Flute 30°



CARBIDE NANO | HR MAX | 2 | 30° Helix | D 0/-0.015

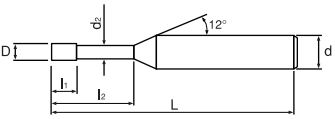
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	l_2	l_1	d_2	L	d
HRE230-100050-050-S04	1.0	5	1.5	0.95	50	4
HRE230-100060-050-S04	1.0	6	1.5	0.95	50	4
HRE230-100080-050-S04	1.0	8	1.5	0.95	50	4
HRE230-100100-050-S04	1.0	10	1.5	0.95	50	4
HRE230-100120-050-S04	1.0	12	1.5	0.95	50	4
HRE230-100160-050-S04	1.0	16	1.5	0.95	50	4
HRE230-150060-050-S04	1.5	6	2.3	1.45	50	4
HRE230-150080-050-S04	1.5	8	2.3	1.45	50	4
HRE230-150100-050-S04	1.5	10	2.3	1.45	50	4
HRE230-150120-050-S04	1.5	12	2.3	1.45	50	4
HRE230-150160-050-S04	1.5	16	2.3	1.45	50	4
HRE230-150180-050-S04	1.5	18	2.3	1.45	50	4
HRE230-150200-050-S04	1.5	20	2.3	1.45	50	4
HRE230-200080-050-S04	2.0	8	3.0	1.95	50	4
HRE230-200100-050-S04	2.0	10	3.0	1.95	50	4
HRE230-200120-050-S04	2.0	12	3.0	1.95	50	4
HRE230-200160-050-S04	2.0	16	3.0	1.95	50	4
HRE230-200180-050-S04	2.0	18	3.0	1.95	50	4
HRE230-200200-050-S04	2.0	20	3.0	1.95	50	4
HRE230-200220-050-S04	2.0	22	3.0	1.95	50	4

Unit (mm)

HRE430 | HR-MAX Rib Flat End Mill 4-Flute 30°



CARBIDE NANO | HR MAX | 4 | 30° Helix | D 0/-0.015

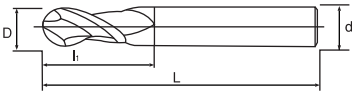
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
○	○	○	●	●	●	–	–	–	○	–	–	–

Model No.	Dia of Mill	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	l_2	l_1	d_2	L	d
HRE430-100050-050-S04	1.0	5	1.5	0.95	50	4
HRE430-100060-050-S04	1.0	6	1.5	0.95	50	4
HRE430-100080-050-S04	1.0	8	1.5	0.95	50	4
HRE430-100100-050-S04	1.0	10	1.5	0.95	50	4
HRE430-100120-050-S04	1.0	12	1.5	0.95	50	4
HRE430-100160-050-S04	1.0	16	1.5	0.95	50	4
HRE430-150060-050-S04	1.5	6	2.3	1.45	50	4
HRE430-150080-050-S04	1.5	8	2.3	1.45	50	4
HRE430-150100-050-S04	1.5	10	2.3	1.45	50	4
HRE430-150120-050-S04	1.5	12	2.3	1.45	50	4
HRE430-150160-050-S04	1.5	16	2.3	1.45	50	4
HRE430-150180-050-S04	1.5	18	2.3	1.45	50	4
HRE430-150200-050-S04	1.5	20	2.3	1.45	50	4
HRE430-200080-050-S04	2.0	8	3.0	1.95	50	4
HRE430-200100-050-S04	2.0	10	3.0	1.95	50	4
HRE430-200120-050-S04	2.0	12	3.0	1.95	50	4
HRE430-200160-050-S04	2.0	16	3.0	1.95	50	4
HRE430-200180-050-S04	2.0	18	3.0	1.95	50	4
HRE430-200200-050-S04	2.0	20	3.0	1.95	50	4
HRE430-200220-050-S04	2.0	22	3.0	1.95	50	4
HRE430-300120-050-S04	3.0	12	4.5	2.85	50	6
HRE430-300160-050-S04	3.0	16	4.5	2.85	50	6
HRE430-300200-050-S04	3.0	20	4.5	2.85	50	6
HRE430-300260-050-S04	3.0	26	4.5	2.85	70	6
HRE430-300300-050-S04	3.0	30	4.5	2.85	70	6
HRE430-400160-050-S04	4.0	16	6	3.85	50	6
HRE430-400200-050-S04	4.0	20	6	3.85	50	6
HRE430-400260-050-S04	4.0	26	6	3.85	70	6
HRE430-400300-050-S04	4.0	30	6	3.85	70	6

Unit (mm)

ALB230 | ALU-MAX Ball End Mill 2-Flute 30°



CARBIDE NANO | 2 | 30° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6 | R ±0.005 D≤6 | R ±0.01 D>6

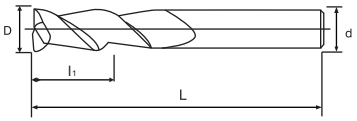
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	–	○	●	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Diameter
	R	l_1	L	d
ALB230-0100-S04	R1.0	4	50	4
ALB230-0150-S04	R1.5	6	50	4
ALB230-0200-S04	R2.0	8	50	4
ALB230-0250-S06	R2.5	10	50	6
ALB230-0300-S06	R3.0	12	50	6
ALB230-0400-S08	R4.0	16	60	8
ALB230-0400-S08	R4.0	16	75	8
ALB230-0500-S10	R5.0	20	75	10
ALB230-0500-S10	R5.0	20	100	10
ALB230-0600-S12	R6.0	24	100	12

Unit (mm)

ALE255 | ALU-MAX Flat End Mill 2-Flute 55°



CARBIDE NANO | 2 | 55° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

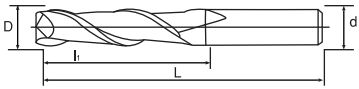
* Applicable Work Material (●Most Suitable, ○Applicable)

WORK MATERIAL											
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	–	○	●	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Diameter
	D	l1	L	d
ALE255-0100-S04	1	3	50	4
ALE255-0150-S04	1.5	4	50	4
ALE255-0200-S04	2	6	50	4
ALE255-0250-S04	2.5	7	50	4
ALE255-0300-S04	3	9	50	4
ALE255-0400-S04	4	11	50	4
ALE255-0400-S06	4	11	50	6
ALE255-0500-S06	5	13	50	6
ALE255-0600-S06	6	16	50	6
ALE255-0800-S08	8	20	60	8
ALE255-1000-S10	10	25	75	10
ALE255-1200-S12	12	30	75	12
ALE255-1600-S16	16	40	100	16
ALE255-2000-S20	20	50	100	20

Unit (mm)

ALEL255 ALU-MAX Long Flute Flat End Mill 2-Flute 55°



CARBIDE NANO | 2 | 55° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

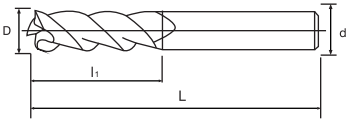
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	–	○	●	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Diameter
	D	l_1	L	d
ALEL255-0300L-075-S04	3	9	75	4
ALEL255-0400L-075-S04	4	12	75	4
ALEL255-0500L-075-S06	5	15	75	6
ALEL255-0600L-075-S06	6	18	75	6
ALEL255-0600L-100-S06	6	24	100	6
ALEL255-0800L-075-S08	8	24	75	8
ALEL255-0800L-100-S08	8	32	100	8
ALEL255-1000L-100-S10	10	30	100	10
ALEL255-1200L-100-S12	12	36	100	12
ALEL255-1600L-150-S16	16	65	150	16
ALEL255-2000L-150-S20	20	80	150	20

Unit (mm)

ALE345 | ALU-MAX Flat End Mill 3-Flute 45°



CARBIDE NANO | 3 | 45° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

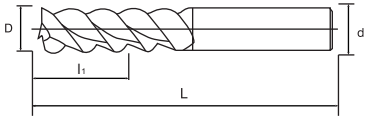
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	–	○	●	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Diameter
	D	l_1	L	d
ALE345-0400-S04	4	10	50	4
ALE345-0500-S05	5	13	50	5
ALE345-0600-S06	6	15	50	6
ALE345-0800-S08	8	20	60	8
ALE345-1000-S10	10	25	75	10
ALE345-1200-S12	12	30	75	12
ALE345-1600-S16	16	40	100	16
ALE345-2000-S20	20	50	100	20

Unit (mm)

ALEL345 ALU-MAX Long Flute Flat End Mill 3-Flute 45°



CARBIDE NANO | 3 | 45° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

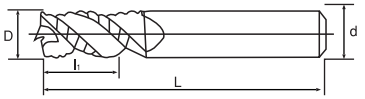
* Applicable Work Material (●Most Suitable, ○Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	–	○	●	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Diameter	
	D	l_1	L	d	
ALEL345-0300L-075-S04	3	9	75	4	
ALEL345-0400L-075-S04	4	12	75	4	
ALEL345-0500L-075-S06	5	15	75	6	
ALEL345-0600L-075-S06	6	18	75	6	
ALEL345-0600L-100-S06	6	24	100	6	
ALEL345-0800L-075-S08	8	24	75	8	
ALEL345-0800L-100-S08	8	32	100	8	
ALEL345-1000L-100-S10	10	30	100	10	
ALEL345-1200L-100-S12	12	36	100	12	
ALEL345-1600L-150-S16	16	65	150	16	
ALEL345-2000L-150-S20	20	80	150	20	

Unit (mm)

ALR327 | ALU-MAX Roughing Flat End Mill 3-Flute 27°



CARBIDE NANO | 3 | 27° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

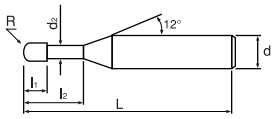
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL												
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels						Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC						
–	–	–	–	–	–	–	–	–	–	○	●	–	–

Model No.	Dia of Mill	Length of Cut	Overall Length	Shank Diameter
	D	l_1	L	d
ALR327-0600-S06	6	15	50	6
ALR327-0800-S08	8	20	60	8
ALR327-1000-S10	10	25	75	10
ALR327-1200-S12	12	30	75	12
ALR327-1600-S16	16	40	100	16
ALR327-2000-S20	20	50	100	20

Unit (mm)

DMRB230 | DIA-MAX Rib Ball End Mill 2-Flute 30° / Diamond coated



CARBIDE MG | DIA CVD | 2 | 30° Helix | R ±0.01 | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL														
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–		
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC							
–	–	–	–	–	–	–	–	●	●	○	●	–		

Model No.	Dia of Mill	Radius of Ball Nose	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	R	l_2	l_1	d_2	L	d
DMRB230-010030-050-S04	**1.0**	**R0.5**	10	3	1.0	50	4
DMRB230-015030-050-S04	**1.5**	**R0.75**	10	3	1.5	50	4
DMRB230-020060-050-S04	**2.0**	**R1**	15	6	1.9	50	4
DMRB230-030060-050-S04	**3.0**	**R1.5**	15	6	2.8	50	4
DMRB230-040100-050-S04	**4.0**	**R2**	15	10	3.7	50	4
DMRB230-060150-075-S06	**6.0**	**R3**	30	15	5.6	75	6
DMRB230-080160-075-S08	**8.0**	**R4**	30	16	7.6	75	8
DMRB230-100260-100-S10	**10.0**	**R5**	40	26	9.4	100	10
DMRB230-120260-100-S12	**12.0**	**R6**	40	26	11.4	100	12

Unit (mm)

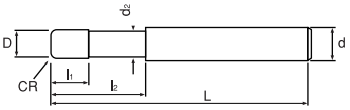
DMRBL230 | DIA-MAX Long shank Rib Ball End Mill 2-Flute 30°/Diamond coated

CARBIDE MG | DIA CVD | 2 | 30° Helix | R ±0.01 | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

Model No.	Dia of Mill	Radius of Ball Nose	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	R	l_2	l_1	d_2	L	d
DMRBL230-030060-075-S03	**3.0**	**R1.5**	25	6	2.8	75	3
DMRBL230-040100-075-S04	**4.0**	**R2**	25	10	3.7	75	4
DMRBL230-030060-100-S03	**3.0**	**R1.5**	30	6	2.8	100	3
DMRBL230-040100-100-S04	**4.0**	**R2**	30	10	3.7	100	4
DMRBL230-060200-100-S06	**6.0**	**R3**	40	20	5.6	100	6
DMRBL230-080260-100-S08	**8.0**	**R4**	40	26	7.5	100	8
DMRBL230-080260-150-S08	**8.0**	**R4**	40	26	7.5	150	8
DMRBL230-100260-150-S10	**10.0**	**R5**	40	26	9.4	150	10
DMRBL230-120260-150-S12	**12.0**	**R6**	40	26	11.6	150	12
DMRBL230-160400-180-S16	**16.0**	**R8**	60	40	15.6	180	16

Unit (mm)

DMRR230 | DIA-MAX Rib Ball End Mill 2-Flute 30° / Diamond coated



CARBIDE MG | DIA CVD | 2 | 30° Helix | R ±0.01 | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable

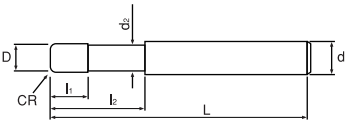
WORK MATERIAL									
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	●	●	○	●	–

Model No.	Dia of Mill	Radius of Ball Nose	Effective Length	Length of Cut	Overall Length	Shank Dia
	D	R	l_2	l_1	L	d
DMRR230-005R005-015-050-S04	0.5	R0.05	7	1.5	50	4
DMRR230-010R010-030-050-S04	1.0	R0.1	10	3	50	4
DMRR230-015R010-030-050-S04	1.5	R0.1	15	3	50	4
DMRR230-020R010-050-050-S04	2.0	R0.1	15	5	50	4

Unit (mm

DMRR 430

DIA-MAX Rib Ball End Mill 4-Flute 30°/Diamond coated



CARBIDE MG | DIA CVD | 4 | 30° Helix | R ±0.01 | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable

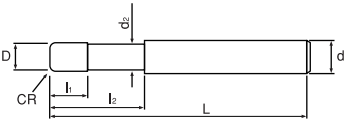
WORK MATERIAL									
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels				Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	●	●	○	●	–

Model No.	Dia of Mill	Radius of Ball Nose	Effective Length	Length of Cut	Overall Length	Shank Dia
	D	R	l_2	l_1	L	d
DMRR430-030R010-010-050-S04	**3.0**	**R0.1**	15	10	50	4
DMRR430-040R050-012-050-S04	**4.0**	**R0.5**	20	12	50	4
DMRR430-060R050-020-075-S06	**6.0**	**R0.5**	30	20	75	6
DMRR430-080R050-025-075-S08	**8.0**	**R0.5**	35	25	75	8
DMRR430-100R050-030-100-S10	**10.0**	**R0.5**	45	30	100	10
DMRR430-120R050-035-100-S12	**12.0**	**R0.5**	45	35	100	12

Unit (mm)

DMRRL430

DIA-MAX Long shank Rib Ball End Mill 4-Flute 30°/ Diamond coated



CARBIDE MG | DIA CVD | 4 | 30° Helix | R ±0.01 | D 0/-0,015 D≤5 | D 0/-0,02 D≥6

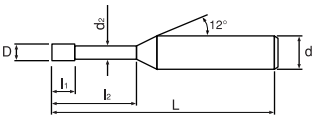
* Applicable Work Material (● Most Suitable, ○ Applicable)

WORK MATERIAL									
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	●	●	○	●	–

Model No.	Dia of Mill	Radius of Ball Nose	Effective Length	Length of Cut	Overall Length	Shank Dia
	D	R	l_2	l_1	L	d
DMRRL430-030R010-012-075-S04	**3.0**	**R0.1**	25	12	75	4
DMRRL430-040R050-020-075-S04	**4.0**	**R0.5**	25	20	75	4
DMRRL430-030R010-012-100-S04	**3.0**	**R0.1**	30	12	100	4
DMRRL430-040R050-012-100-S04	**4.0**	**R0.5**	30	12	100	4
DMRRL430-060R050-025-100-S06	**6.0**	**R0.5**	40	25	100	6
DMRRL430-080R050-030-100-S08	**8.0**	**R0.5**	45	30	100	8
DMRRL430-080R050-040-150-S08	**8.0**	**R0.5**	60	40	150	8
DMRRL430-100R050-045-150-S10	**10.0**	**R0.5**	60	45	150	10
DMRRL430-120R050-050-150-S12	**12.0**	**R0.5**	70	50	150	12
DMRRL430-160R050-060-180-S16	**16.0**	**R0.5**	80	60	180	16

Unit (mm)

DMRE230 | DIA-MAX Rib Flat End Mill 2-Flute 30°/Diamond coated



CARBIDE MG | DIA CVD | 2 | 30° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable)

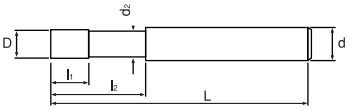
WORK MATERIAL										
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	-50HRC	-55HRC	-60HRC	-62HRC	-65HRC					
–	–	–	–	–	–	–	–	●	●	○	●	–

Model No.	Dia of Mill	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	l_2	l_1	d_2	L	d
DMRE230-005015-050-S04	**0.5**	7	1.5	0.5	50	4
DMRE230-010030-050-S04	**1.0**	10	3	1.0	50	4
DMRE230-015030-050-S04	**1.5**	15	3	1.5	50	4
DMRE230-020050-050-S04	**2.0**	15	5	2.0	50	4

Unit (mm)

DMRE 430

DIA-MAX Rib Flat End Mill 4-Flute 30°/Diamond Coated



CARBIDE MG | DIA CVD | 4 | 30° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

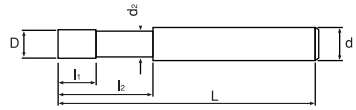
* Applicable Work Material (●Most Suitable, ○Applicable

WORK MATERIAL														
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels						Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC						
–	–	–	–	–	–	–	–	–	●	●	○	●	–

Model No.	Dia of Mill	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	l_2	l_1	d_2	L	d
DMRE430-030010-050-S04	**3.0**	15	10	2.8	50	4
DMRE430-040012-050-S04	**4.0**	20	12	3.7	50	4
DMRE430-060020-075-S06	**6.0**	30	20	5.6	75	6
DMRE430-080025-075-S08	**8.0**	35	25	7.6	75	8
DMRE430-100030-100-S10	**10.0**	45	30	9.6	100	10
DMRE430-120035-100-S12	**12.0**	45	35	11.4	100	12

Unit (mm)

DMREL430 | DIA-MAX Long Shank Rib Flat End Mill 4-Flute 30°/ Diamond Coated



CARBIDE MG | DIA CVD | 4 | 30° Helix | D 0/-0.015 D≤5 | D 0/-0.02 D≥6

* Applicable Work Material (● Most Suitable, ○ Applicable

WORK MATERIAL									
Carbon Steels	Alloy Steels	Stainless Steels	Prehardened Steels Hardened Steels					Graphite	Copper	Aluminium Alloys	Glass fiberreinforced plastic	–
S45C/S50C	SCM	S304L/316L	~50HRC	~55HRC	~60HRC	~62HRC	~65HRC					
–	–	–	–	–	–	–	–	●	●	○	●	–

Model No.	Dia of Mill	Effective Length	Length of Cut	Neck Dia	Overall Length	Shank Dia
	D	l_2	l_1	d_2	L	d
DMREL430-030012-075-S04	**3.0**	25	12	2.8	75	4
DMREL430-040020-075-S04	**4.0**	25	20	3.7	75	4
DMREL430-030012-100-S04	**3.0**	30	12	2.8	100	4
DMREL430-040012-100-S04	**4.0**	30	12	3.7	100	4
DMREL430-060025-100-S06	**6.0**	40	25	5.6	100	6
DMREL430-080030-100-S08	**8.0**	45	30	7.5	100	8
DMREL430-080040-150-S08	**8.0**	60	40	7.5	150	8
DMREL430-100045-150-S10	**10.0**	60	45	9.6	150	10
DMREL430-120050-150-S12	**12.0**	70	50	11.6	150	12
DMREL430-160060 180-S16	**16.0**	80	60	15.6	180	16

Unit (mm)

KOVOSVITAVY s.r.o.

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