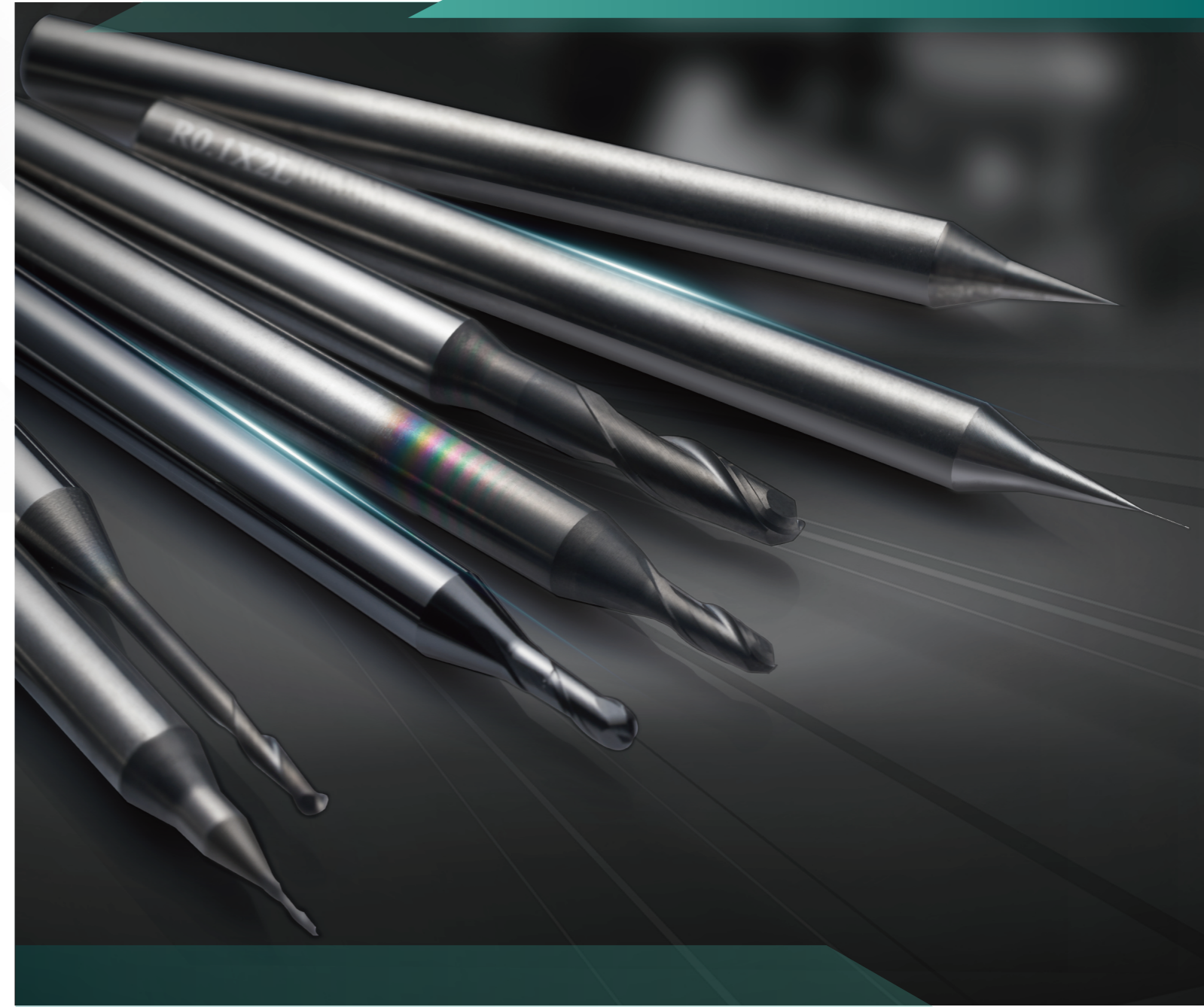


Solid Carbide End Mills



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Website YouTube LinkedIn

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Converging of Global Resources

Professional as Industry Leader

CONPROFE

With its roots back to 2003, Conprofe is a Provider of Efficient, Green and Intelligent Manufacturing Solutions and Key Units. It has been holding on to the idea of "Converging of Global Resources, Professional as Industry Leader" in the past two decades. Revolving around "Efficient, Green and Intelligent Manufacturing", the company has achieved a giant leap from parts, units to machines and developed a product portfolio with three major industries - Precision Tools, Key Units and CNC Machine Tools, which covers eight categories of products, including Super-hard Tools, Tapping Tools, Precision Tool Holders, Ultrasonic Technologies, Green Technologies, Precision Units, Ultrasonic-Green CNC Machine Tools and Automation. Its customers have spread across diverse sectors, such as semiconductors, aviation & aerospace, medical field, automotive, consumable electronics, education and general precision manufacturing, etc.

Conprofe perseveres in laying a solid foundation in the domestic market while keeping its eyes open to the world. Headquartered in Guangzhou Science City, the company has established sales and service centers in seven domestic regions and forged a network of R&D, sales and service based in Hong Kong, Taiwan, the United States, South Korea, India and Vietnam, etc. With its products being exported to over 70 countries and regions across six continents, Conprofe's integrated distribution of R&D, production, sales and service around the globe has gradually come into being.

Conprofe persists in innovation-driven developing strategy and owns two National High-tech Enterprises under the Group. The company's Frontier Technology Research Institute (FTRI) and Guangdong Province Engineering Technology Center (GPETC) has developed over 850 core technology patents. Its primary product technologies have reached an internationally advanced level, as assessed and acknowledged by experts led by members of the Chinese Academy of Engineering (CAE). Furthermore, Conprofe has successively been granted the Guangdong Scientific and Technological Progress Award (First Prize 2020, Second Prize 2021), Guangdong Patent Award (Silver), China Patent Award (Excellence) and has been honored as Enterprise with Significant Contribution to Guangdong's Supplies for COVID-19 Prevention and Control, Guangzhou Pioneering Private Enterprise, etc.



User Guide

Workpiece Material

M	H	P	Ti	Al	Cu	G
Stainless Steel	Superhard Steel	Plastics	Titanium Alloy	Aluminum & Aluminum Alloy	Copper	Graphite

Surface Treatment

Bright	CrN	AlTiN	TiN	DIA	DLC	Special
Bright Finish	Chromium Nitride Coating	Aluminum Titanium Nitride Coating	Titanium Nitride Coating	Diamond Coating	Diamond-Like Carbon Coating	Special Coating

Tool Material

NG HM	MG HM
Nano-Grain Carbide	Micro-Grain Carbide

Helix Angle

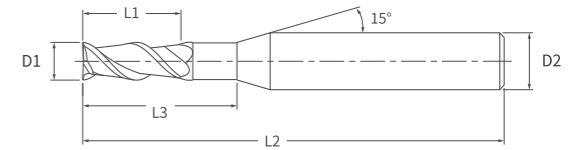
30°	35°	40°

No. of Flutes

2 Flutes	2 Flutes	3 Flutes	4 Flutes

Flat End Mills for Stainless Steel Machining

2 Flutes Micro-Diameter Tool



- Suitable for machining stainless steel, titanium alloy and common steel of hardness within HRC40
- Special geometric design for higher tool strength
- Excellent accuracy and consistency in dimension

M	AlTiN	MG HM		
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Cutting Diameter Tolerance	Shank Diameter Tolerance
-0.002 ~ -0.010	h5

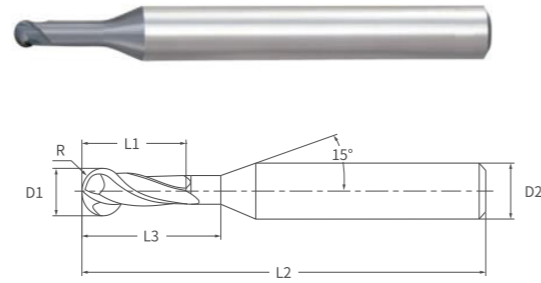
Ordering Code	Cutting Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
MEM2 04 050 0005 0000	0.05	4	0.05	-	50
MEM2 04 050 0005 0010	0.05	4	0.05	0.10	50
MEM2 04 050 0005 0015	0.05	4	0.05	0.15	50
MEM2 04 050 0005 0020	0.05	4	0.05	0.20	50
MEM2 04 050 0010 0000	0.10	4	0.10	-	50
MEM2 04 050 0010 0020	0.10	4	0.10	0.20	50
MEM2 04 050 0010 0030	0.10	4	0.10	0.30	50
MEM2 04 050 0010 0040	0.10	4	0.10	0.40	50
MEM2 04 050 0020 0000	0.20	4	0.30	-	50
MEM2 04 050 0020 0050	0.20	4	0.30	0.50	50
MEM2 04 050 0020 0080	0.20	4	0.30	0.80	50
MEM2 04 050 0020 0100	0.20	4	0.30	1.00	50
MEM2 04 050 0020 0125	0.20	4	0.30	1.25	50
MEM2 04 050 0020 0150	0.20	4	0.30	1.50	50
MEM2 04 050 0030 0000	0.30	4	0.45	-	50
MEM2 04 050 0030 0090	0.30	4	0.45	0.90	50
MEM2 04 050 0030 0120	0.30	4	0.45	1.20	50
MEM2 04 050 0030 0150	0.30	4	0.45	1.50	50
MEM2 04 050 0030 0180	0.30	4	0.45	1.80	50
MEM2 04 050 0030 0200	0.30	4	0.45	2.00	50
MEM2 04 050 0040 0000	0.40	4	0.60	-	50
MEM2 04 050 0040 0080	0.40	4	0.60	0.80	50
MEM2 04 050 0040 0160	0.40	4	0.60	1.60	50
MEM2 04 050 0040 0240	0.40	4	0.60	2.40	50
MEM2 04 050 0050 0000	0.50	4	0.75	-	50
MEM2 04 050 0050 0100	0.50	4	0.75	1.00	50
MEM2 04 050 0050 0200	0.50	4	0.75	2.00	50
MEM2 04 050 0050 0300	0.50	4	0.75	3.00	50

Unit: mm

Ball End Mills for Stainless Steel Machining

2 Flutes Micro-Diameter Tool

- Suitable for machining stainless steel, titanium alloy and common steel of hardness within HRC40
- Special geometric design for higher tool strength
- Excellent accuracy and consistency in dimension



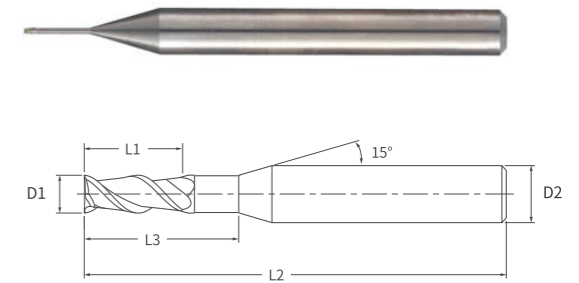
Cutting Diameter Tolerance	Shank Diameter Tolerance
-0.002 ~ -0.010	h5

Ordering Code	Cutting Diameter D1	Corner Radius R	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
MBM2 04 050 0020 0000	0.2	0.10	4	0.3	-	50
MBM2 04 050 0020 0040	0.2	0.10	4	0.3	0.4	50
MBM2 04 050 0020 0080	0.2	0.10	4	0.3	0.8	50
MBM2 04 050 0020 0120	0.2	0.10	4	0.3	1.2	50
MBM2 04 050 0020 0160	0.2	0.10	4	0.45	1.6	50
MBM2 04 050 0030 0000	0.3	0.15	4	0.45	-	50
MBM2 04 050 0030 0060	0.3	0.15	4	0.45	0.6	50
MBM2 04 050 0030 0120	0.3	0.15	4	0.45	1.2	50
MBM2 04 050 0030 0180	0.3	0.15	4	0.45	1.8	50
MBM2 04 050 0030 0240	0.3	0.15	4	0.45	2.4	50
MBM2 04 050 0040 0000	0.4	0.20	4	0.60	-	50
MBM2 04 050 0040 0080	0.4	0.20	4	0.60	0.8	50
MBM2 04 050 0040 0160	0.4	0.20	4	0.60	1.6	50
MBM2 04 050 0040 0240	0.4	0.20	4	0.60	2.4	50
MBM2 04 050 0040 0320	0.4	0.20	4	0.60	3.2	50
MBM2 04 050 0050 0000	0.5	0.25	4	0.75	-	50
MBM2 04 050 0050 0100	0.5	0.25	4	0.75	1.0	50
MBM2 04 050 0050 0200	0.5	0.25	4	0.75	2.0	50
MBM2 04 050 0050 0300	0.5	0.25	4	0.75	3.0	50
MBM2 04 050 0050 0400	0.5	0.25	4	0.75	4.0	50
MBM2 04 050 0060 0000	0.6	0.30	4	0.90	-	50
MBM2 04 050 0060 0120	0.6	0.30	4	0.90	1.2	50
MBM2 04 050 0060 0240	0.6	0.30	4	0.90	2.4	50
MBM2 04 050 0060 0360	0.6	0.30	4	0.90	3.6	50
MBM2 04 050 0060 0480	0.6	0.30	4	0.90	4.8	50
MBM2 04 050 0060 0600	0.6	0.30	4	0.90	6.0	50

Flat End Mills for Copper Machining

2 Flutes Micro-Diameter Tool

- Suitable for machining non-metallic materials, such as copper, copper alloy and high-strength plastic, etc.
- Special geometric design for higher tool strength
- Excellent accuracy and consistency in dimension



Cutting Diameter Tolerance	Shank Diameter Tolerance
-0.002 ~ -0.010	h5

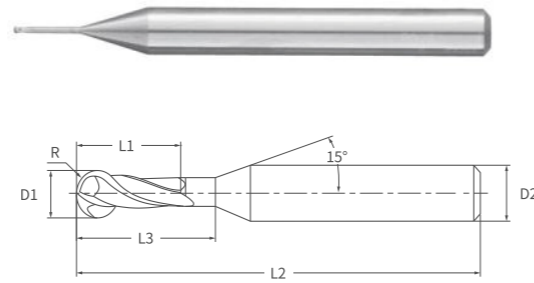
Ordering Code	Cutting Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
CuEM2 04 050 0005 0000	0.05	4	0.05	-	50
CuEM2 04 050 0005 0010	0.05	4	0.05	0.10	50
CuEM2 04 050 0005 0015	0.05	4	0.05	0.15	50
CuEM2 04 050 0005 0020	0.05	4	0.05	0.20	50
CuEM2 04 050 0010 0000	0.10	4	0.10	-	50
CuEM2 04 050 0010 0020	0.10	4	0.10	0.20	50
CuEM2 04 050 0010 0030	0.10	4	0.10	0.30	50
CuEM2 04 050 0010 0040	0.10	4	0.10	0.40	50
CuEM2 04 050 0020 0000	0.20	4	0.30	-	50
CuEM2 04 050 0020 0050	0.20	4	0.30	0.50	50
CuEM2 04 050 0020 0080	0.20	4	0.30	0.80	50
CuEM2 04 050 0020 0100	0.20	4	0.30	1.00	50
CuEM2 04 050 0020 0125	0.20	4	0.30	1.25	50
CuEM2 04 050 0020 0150	0.20	4	0.30	1.50	50
CuEM2 04 050 0030 0000	0.30	4	0.45	-	50
CuEM2 04 050 0030 0090	0.30	4	0.45	0.90	50
CuEM2 04 050 0030 0120	0.30	4	0.45	1.20	50
CuEM2 04 050 0030 0150	0.30	4	0.45	1.50	50
CuEM2 04 050 0030 0180	0.30	4	0.45	1.80	50
CuEM2 04 050 0030 0200	0.30	4	0.45	2.00	50
CuEM2 04 050 0040 0000	0.40	4	0.60	-	50
CuEM2 04 050 0040 0080	0.40	4	0.60	0.80	50
CuEM2 04 050 0040 0160	0.40	4	0.60	1.60	50
CuEM2 04 050 0040 0240	0.40	4	0.60	2.40	50
CuEM2 04 050 0050 0000	0.50	4	0.75	-	50
CuEM2 04 050 0050 0100	0.50	4	0.75	1.00	50
CuEM2 04 050 0050 0200	0.50	4	0.75	2.00	50
CuEM2 04 050 0050 0300	0.50	4	0.75	3.00	50

Unit: mm

Ball End Mills for Copper Machining

2 Flutes Micro-Diameter Tool

- Suitable for machining copper, copper alloy and non-metallic materials such as some high-strength plastic, etc.
- Special geometric design for higher tool strength
- Excellent accuracy and consistency in dimension



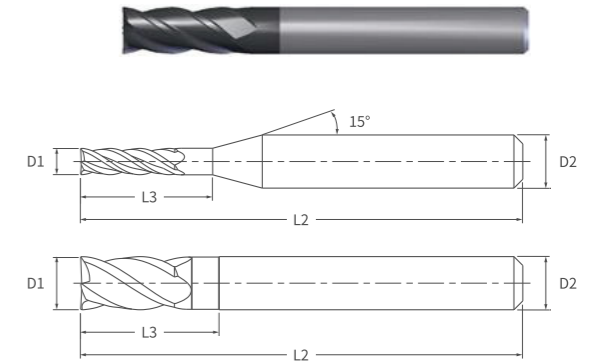
Cutting Diameter Tolerance	Shank Diameter Tolerance
-0.002 ~ -0.010	h5

Ordering Code	Cutting Diameter D1	Corner Radius R	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
CuBM2 04 050 0020 0000	0.2	0.10	4	0.30	-	50
CuBM2 04 050 0020 0040	0.2	0.10	4	0.30	0.4	50
CuBM2 04 050 0020 0080	0.2	0.10	4	0.30	0.8	50
CuBM2 04 050 0020 0120	0.2	0.10	4	0.30	1.2	50
CuBM2 04 050 0020 0160	0.2	0.10	4	0.45	1.6	50
CuBM2 04 050 0030 0000	0.3	0.15	4	0.45	-	50
CuBM2 04 050 0030 0060	0.3	0.15	4	0.45	0.6	50
CuBM2 04 050 0030 0120	0.3	0.15	4	0.45	1.2	50
CuBM2 04 050 0030 0180	0.3	0.15	4	0.45	1.8	50
CuBM2 04 050 0030 0240	0.3	0.15	4	0.45	2.4	50
CuBM2 04 050 0040 0000	0.4	0.20	4	0.60	-	50
CuBM2 04 050 0040 0080	0.4	0.20	4	0.60	0.8	50
CuBM2 04 050 0040 0160	0.4	0.20	4	0.60	1.6	50
CuBM2 04 050 0040 0240	0.4	0.20	4	0.60	2.4	50
CuBM2 04 050 0040 0320	0.4	0.20	4	0.60	3.2	50
CuBM2 04 050 0050 0000	0.5	0.25	4	0.75	-	50
CuBM2 04 050 0050 0100	0.5	0.25	4	0.75	1.0	50
CuBM2 04 050 0050 0200	0.5	0.25	4	0.75	2.0	50
CuBM2 04 050 0050 0300	0.5	0.25	4	0.75	3.0	50
CuBM2 04 050 0050 0400	0.5	0.25	4	0.75	4.0	50
CuBM2 04 050 0060 0000	0.6	0.30	4	0.90	-	50
CuBM2 04 050 0060 0120	0.6	0.30	4	0.90	1.2	50
CuBM2 04 050 0060 0240	0.6	0.30	4	0.90	2.4	50
CuBM2 04 050 0060 0360	0.6	0.30	4	0.90	3.6	50
CuBM2 04 050 0060 0480	0.6	0.30	4	0.90	4.8	50
CuBM2 04 050 0060 0600	0.6	0.30	4	0.90	6.0	50

Flat End Mills for Graphite Machining

4 Flutes Diamond Coating

- Suitable for machining graphite, silumin, high-strength fiber and rigid plastic, etc.
- High wear resistance and excellent surface finish due to nanocrystalline diamond coating
- Excellent accuracy and consistency in dimension



Cutting Diameter Tolerance (D2 ≤ 12)	Cutting Diameter Tolerance (D2 > 12)	Shank Diameter Tolerance
0 ~ -0.018	0 ~ -0.025	h5

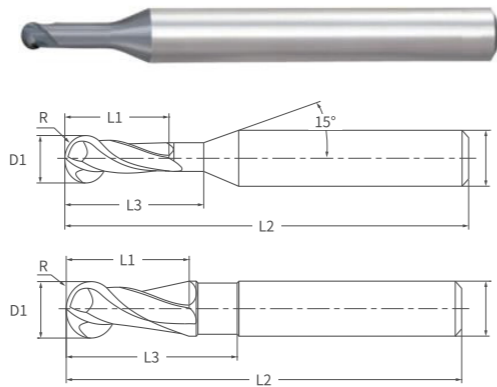
Ordering Code	Cutting Diameter D1	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
GEM4 04 050 010 030	1.0	4	3	5	50
GEM4 04 050 015 040	1.5	4	4	6	50
GEM4 04 050 020 050	2.0	4	5	8	50
GEM4 04 050 025 060	2.5	4	6	10	50
GEM4 04 050 030 060	3.0	4	8	12	50
GEM4 04 050 035 060	3.5	4	8	12	50
GEM4 04 050 040 100	4.0	4	10	12	50
GEM4 06 050 030 080	3.0	6	8	12	50
GEM4 06 050 035 080	3.5	6	8	12	50
GEM4 06 050 040 100	4.0	6	10	12	50
GEM4 06 050 045 120	4.5	6	12	15	50
GEM4 06 050 050 120	5.0	6	12	15	50
GEM4 06 050 055 150	5.5	6	15	20	50
GEM4 06 050 060 150	6.0	6	15	20	50
GEM4 08 060 065 160	6.5	8	16	20	60
GEM4 08 060 070 160	7.0	8	16	20	60
GEM4 08 060 075 180	7.5	8	18	20	60
GEM4 08 060 080 180	8.0	8	18	20	60
GEM4 10 075 085 200	8.5	10	20	-	75
GEM4 10 075 090 200	9.0	10	20	-	75
GEM4 10 075 095 250	9.5	10	25	-	75
GEM4 10 075 100 250	10.0	10	25	-	75
GEM4 12 075 110 300	11.0	12	30	-	75
GEM4 12 075 120 300	12.0	12	30	-	75
GEM4 16 100 140 400	14.0	16	40	-	100
GEM4 16 100 160 400	16.0	16	40	-	100
GEM4 20 100 180 400	18.0	20	40	-	100
GEM4 20 100 200 450	20.0	20	45	-	100

Unit: mm

Ball End Mills for Graphite Machining

4 Flutes Diamond Coating

- Suitable for machining graphite, silumin, high-strength fiber and rigid plastic, etc.
- High wear resistance and excellent surface finish due to nanocrystalline diamond coating
- Excellent accuracy and consistency in dimension



Cutting Diameter Tolerance (D2 ≤ 12)	Cutting Diameter Tolerance (D2 > 12)	Shank Diameter Tolerance
0 ~ -0.018	0 ~ -0.025	h5

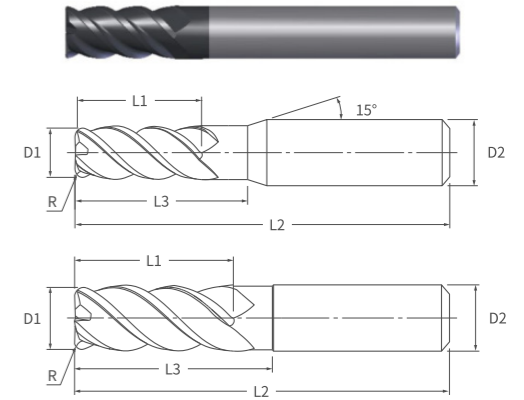


Ordering Code	Cutting Diameter D1	Corner Radius R	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
GBM2 04 050 010 030	1.0	0.50	4	3	5	50
GBM2 04 050 015 040	1.5	0.75	4	4	6	50
GBM2 04 050 020 050	2.0	1.00	4	5	8	50
GBM2 04 050 025 060	2.5	1.25	4	6	10	50
GBM2 04 050 030 060	3.0	1.50	4	8	12	50
GBM2 04 050 035 060	3.5	1.75	4	8	12	50
GBM2 04 050 040 100	4.0	2.00	4	10	12	50
GBM2 06 050 030 080	3.0	1.50	6	8	12	50
GBM2 06 050 035 080	3.5	1.75	6	8	12	50
GBM2 06 050 040 100	4.0	2.00	6	10	12	50
GBM2 06 050 045 120	4.5	2.25	6	12	15	50
GBM2 06 050 050 120	5.0	2.50	6	12	15	50
GBM2 06 050 055 150	5.5	2.75	6	15	20	50
GBM2 06 050 060 150	6.0	3.00	6	15	20	50
GBM2 08 060 065 160	6.5	3.25	8	16	20	60
GBM2 08 060 070 160	7.0	3.50	8	16	20	60
GBM2 08 060 075 180	7.5	3.75	8	18	20	60
GBM2 08 060 080 180	8.0	4.00	8	18	20	60
GBM2 10 075 085 200	8.5	4.25	10	20	-	75
GBM2 10 075 090 200	9.0	4.50	10	20	-	75
GBM2 10 075 095 250	9.5	4.75	10	25	-	75
GBM2 10 075 100 250	10.0	5.00	10	25	-	75
GBM2 12 075 110 300	11.0	5.50	12	30	-	75
GBM2 12 075 120 300	12.0	6.00	12	30	-	75
GBM2 16 100 140 400	14.0	7.00	16	40	-	100
GBM2 16 100 160 400	16.0	8.00	16	40	-	100
GBM2 20 100 180 400	18.0	9.00	20	40	-	100
GBM2 20 100 200 450	20.0	10.00	20	45	-	100

Bull Nose End Mills for Graphite Machining

4 Flutes Diamond Coating

- Suitable for machining graphite, silumin, high-strength fiber and rigid plastic, etc.
- High wear resistance and excellent surface finish due to nanocrystalline diamond coating
- Excellent accuracy and consistency in dimension



Cutting Diameter Tolerance (D2 ≤ 12)	Cutting Diameter Tolerance (D2 > 12)	Shank Diameter Tolerance
0 ~ -0.018	0 ~ -0.025	h5



Ordering Code	Cutting Diameter D1	Corner Radius R	Shank Diameter D2	Length of Cut L1	Length Below Shank L3	Overall Length L2
GRM4 04 050 010 030	1.0	0.1	4	3	5	50
GRM4 04 050 015 040	1.5	0.1	4	4	6	50
GRM4 04 050 020 050	2.0	0.2	4	5	8	50
GRM4 04 050 025 060	2.5	0.2	4	6	10	50
GRM4 04 050 030 060	3.0	0.3	4	8	12	50
GRM4 04 050 035 060	3.5	0.3	4	8	12	50
GRM4 04 050 040 100	4.0	0.5	4	10	12	50
GRM4 06 050 030 080	3.0	0.3	6	8	12	50
GRM4 06 050 035 080	3.5	0.3	6	8	12	50
GRM4 06 050 040 100	4.0	0.5	6	10	12	50
GRM4 06 050 045 120	4.5	0.5	6	12	15	50
GRM4 06 050 050 120	5.0	0.5	6	12	15	50
GRM4 06 050 055 150	5.5	0.5	6	15	20	50
GRM4 06 050 060 150	6.0	1.0	6	15	20	50
GRM4 08 060 065 160	6.5	1.0	8	16	20	60
GRM4 08 060 070 160	7.0	1.0	8	16	20	60
GRM4 08 060 075 180	7.5	1.0	8	18	20	60
GRM4 08 060 080 180	8.0	1.0	8	18	20	60
GRM4 10 075 085 200	8.5	1.0	10	20	-	75
GRM4 10 075 090 200	9.0	1.0	10	20	-	75
GRM4 10 075 095 250	9.5	1.0	10	25	-	75
GRM4 10 075 100 250	10.0	1.0	10	25	-	75
GRM4 12 075 110 300	11.0	1.0	12	30	-	75
GRM4 12 075 120 300	12.0	1.0	12	30	-	75
GRM4 16 100 140 400	14.0	1.0	16	40	-	100
GRM4 16 100 160 400	16.0	1.0	16	40	-	100
GRM4 20 100 180 400	18.0	1.0	20	40	-	100
GRM4 20 100 200 450	20.0	1.0	20	45	-	100

Unit: mm