



TEN SOON

Users' Experience is our Priority!

ECONOMIC ENDMILL SERIES
PRODUCT
CATALOGUE
2018

Provides Solution

to all your machining requirements.

Committed to customer satisfaction through quality product and service provision, Ten Soon Machine Tools provides precision cutting tools, Machine Tool Accessories and Machine Tool Holders; enabling its clients to focus on efficient machining. It offers variety of innovative products contemporaneous with the industrial and technological progress.

After-sales is also a paramount as Ten Soon closely collaborates with its clients during its growth process, creating mutual benefit, growth, and sustainable development through excellent products with them.



Ten Soon Machine Tools, Inc.

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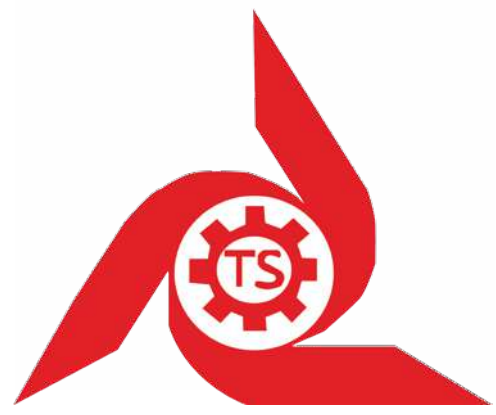


Company Profile

Ten Soon Machine Tools, Inc. (Terng Shuenn) was founded in 1989 at Taipei, Taiwan. With its high quality products and customer-oriented service, Ten Soon became the most famous machine tool accessories supplier in Taiwan.

In 1992, it expanded its business in China with the establishment of Jousn (Ten Soon China) at Dongguan, China, and has established almost 13 branches around the country.

In 2018, Ten Soon Machine Tools was established in Laguna Technopark, Biñan City, Laguna, Philippines. With its company tagline of "*Users' Experience is our Priority*", Ten Soon Machine Tools, Inc. aims to become the leading local and professional machine tools supplier across the national market by providing quality and superior products and service to attain customers' need and satisfaction.



TEN SOON
MACHINE TOOLS, INC.

Users' Experience is Our Priority

is an
authorized distributor
of



Ask for a CATALOG now!



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ECONOMIC ENDMILL SELECTION CHART

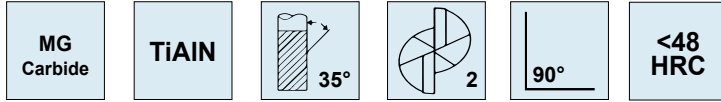
Based on Work Material

● Most Suitable

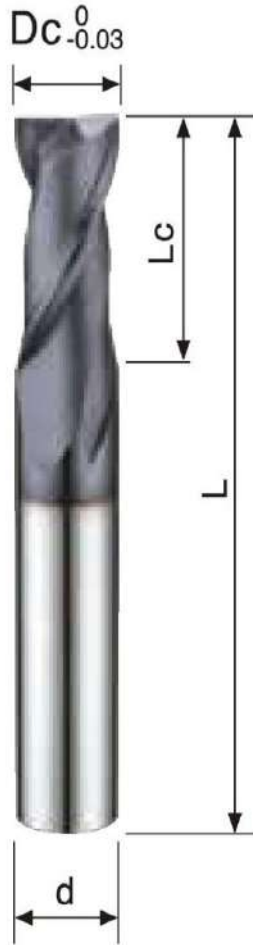
○ Suitable

Endmill Type	Product Code	Product Name / Product Image	Specifications PAGE	Work Material																									
				P			H				M	K	N				S												
				GR1 Carbon Steel	GR2 Low Alloyed Steel <24 HRC	GR3 High Alloyed Steel <30 HRC	GR4 Hardened Steel 30-38 HRC	GR5 Hardened Steel 38-48 HRC	GR6 Hardened Steel 48-58 HRC	GR7 Hardened Steel 58-68 HRC	GR8 Stainless Steel	GR9 Cast Iron	GR10 Aluminum	GR11 Copper	GR12 Plastics	GR13 Composite Material	GR14 Graphite	GR15 Titanium	GR16 Nickel	GR17 Heat- Resistant Steel									
FCF (FLAT ENDMILLS FOR GENERAL USE)	FCF200P	2 Flutes Flat Endmill	A03	●	●	●	●	●				○	●	○															
	FCF200L	2 Flutes Flat Endmill Long Shank	A04	●	●	●	●	●				○	●	○															
	FCF400P	4 Flutes Flat Endmill	A05	●	●	●	●	●				○	●	○															
	FCF400L	4 Flutes Flat Endmill Long Shank	A06	●	●	●	●	●				○	●	○															
	FCF201P	2 Flutes Flat Endmill Hard Material	A07	●	●	●	●	●	●	○	○	○	●	○															
	FCF201L	2 Flutes Flat Endmill Long Shank Hard Material	A08	●	●	●	●	●	●	○	○	○	●	○															
	FCF401P	4 Flutes Flat Endmill Hard Material	A09	●	●	●	●	●	●	○	○	○	●	○															
	FCF401L	4 Flutes Flat Endmill Long Shank Hard Material	A10	●	●	●	●	●	●	○	○	○	●	○															
FBF (BALL ENDMILLS)	FCB200P	2 Flutes Ball Endmill	A11	●	●	●	●	●				○	●	○															
	FCB200L	2 Flutes Ball Endmill Long Shank	A12	●	●	●	●	●				○	●	○															
	FCB201P	2 Flutes Ball Endmill Hard Material	A13	●	●	●	●	●	●	○	○	○	●	○															
	FCB201L	2 Flutes Ball Endmill Long Shank Hard Material	A14	●	●	●	●	●	●	○	○	○	●	○															

FCF200P (2 Flutes ♦ Flat Endmill)

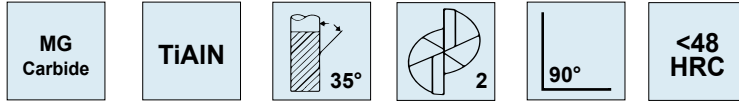


Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel				Signatures Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	○	○	○	○	○	○	○	○



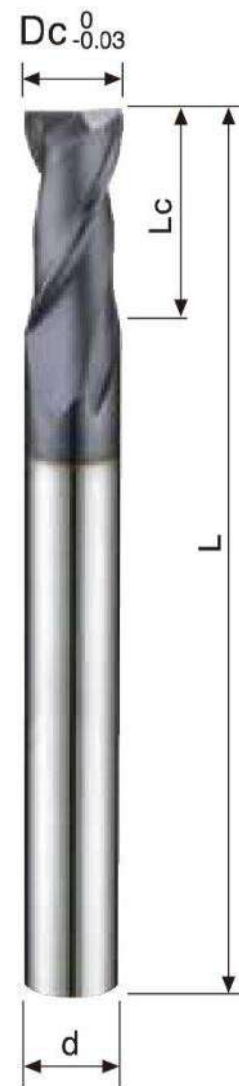
Code No.	Dc	Lc	L	d
FCF200P-1	1	3	50	4
FCF200P-1.5	1.5	5	50	4
FCF200P-2	2	6	50	4
FCF200P-2.5	2.5	8	50	4
FCF200P-3	3	8	50	6
FCF200P-3A	3A	11	50	4
FCF200P-3B	3B	8	50	3
FCF200P-4	4	8	50	6
FCF200P-4A	4A	11	50	4
FCF200P-5	5	13	50	6
FCF200P-6	6	16	50	6
FCF200P-8	8	20	60	8
FCF200P-10	10	25	72	10
FCF200P-12	12	30	75	12
FCF200P-14	14	32	90	16
FCF200P-16	16	40	100	16
FCF200P-18	18	40	100	20
FCF200P-20	20	40	100	20

FCF200L (2 Flutes ♦ Flat Endmill ♦ Long Shank)

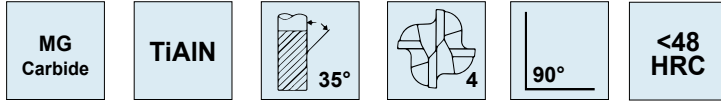


Carbon Steel	Low Alloy Steels	High Alloy Steels	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steels
●	●	●	30-38 HRC	38-48 HRC	48-55 HRC	55-68 HRC	●	●	○	○	○	○	○	○	○	○

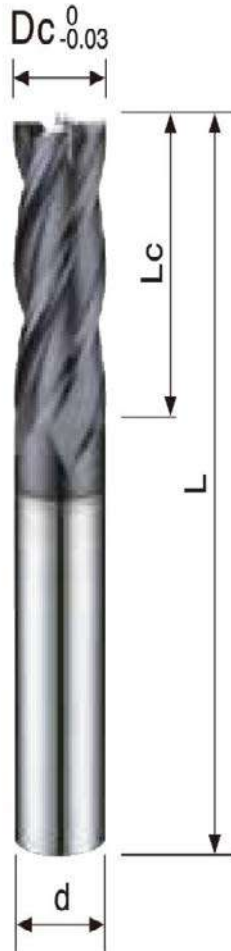
Code No.	Dc	Lc	L	d
FCF200L-3	3	12	70	6
FCF200L-4	4	15	70	6
FCF200L-5	5	20	80	6
FCF200L-6	6	20	80	6
FCF200L-8	8	25	100	8
FCF200L-10	10	30	100	10
FCF200L-12	12	40	110	12
FCF200L-16	16	50	140	16
FCF200L-20	20	60	160	20



FCF400P (4 Flutes ♦ Flat Endmill)

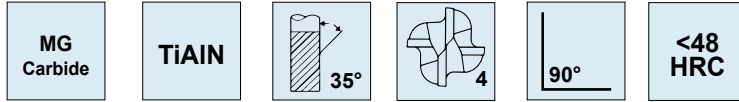


Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel				Signatures Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	●	●	●	●	●	●	●	●



Code No.	Dc	Lc	L	d
FCF400P-1	1	3	50	4
FCF400P-1.5	1.5	5	50	4
FCF400P-2	2	6	50	4
FCF400P-2.5	2.5	8	50	4
FCF400P-3	3	8	50	6
FCF400P-3A	3A	8	50	4
FCF400P-3B	3B	8	50	3
FCF400P-4	4	11	50	6
FCF400P-4A	4A	11	50	4
FCF400P-5	5	13	50	6
FCF400P-6	6	16	50	6
FCF400P-8	8	20	60	8
FCF400P-10	10	25	72	10
FCF400P-12	12	30	75	12
FCF400P-14	14	32	90	16
FCF400P-16	16	40	100	16
FCF400P-18	18	40	100	20
FCF400P-20	20	40	100	20

FCF400L (4 Flutes ♦ Flat Endmill ♦ Long Shank)

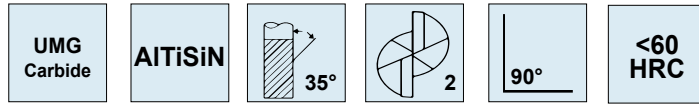


Carbon Steel	Low Alloy Steels	High Alloy Steels	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steels
●	●	●	30-38 HRC	38-48 HRC	48-55 HRC	55-68 HRC	●	●	○	○	○	○	○	○	○	○

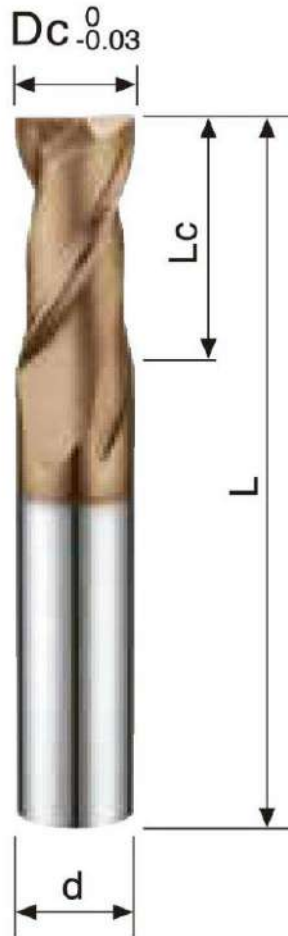
Code No.	Dc	Lc	L	d
FCF400L-3	3	12	70	6
FCF400L-4	4	15	70	6
FCF400L-5	5	20	80	6
FCF400L-6	6	20	80	6
FCF400L-8	8	25	100	8
FCF400L-10	10	30	100	10
FCF400L-12	12	40	110	12
FCF400L-16	16	50	140	16
FCF400L-20	20	60	160	20



FCF201P (2 Flutes ♦ Flat Endmill ♦ Hard Material)

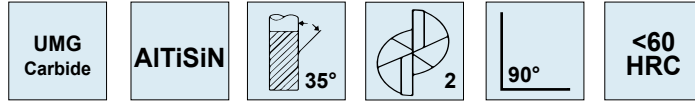


Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	○	○	○	○	○	○	○	○



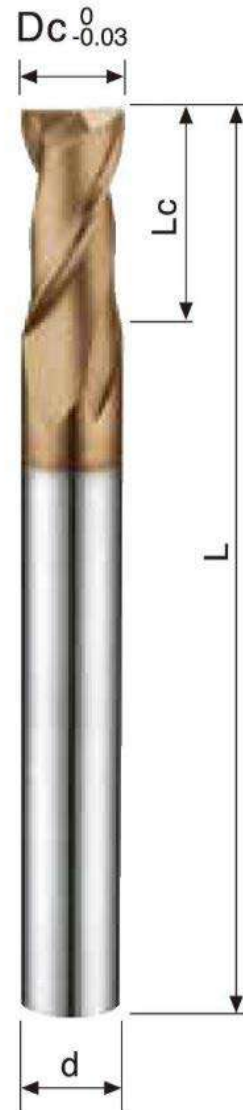
Code No.	Dc	Lc	L	d
FCF201P-1	1	3	50	4
FCF201P-1.5	1.5	5	50	4
FCF201P-2	2	6	50	4
FCF201P-2.5	2.5	8	50	4
FCF201P-3	3	8	50	6
FCF201P-3A	3A	8	50	4
FCF201P-3B	3B	8	50	3
FCF201P-4	4	11	50	6
FCF201P-4A	4A	11	50	4
FCF201P-5	5	13	50	6
FCF201P-6	6	16	50	6
FCF201P-8	8	20	60	8
FCF201P-10	10	25	72	10
FCF201P-12	12	30	75	12
FCF201P-14	14	32	90	16
FCF201P-16	16	40	100	16
FCF201P-18	18	40	100	20
FCF201P-20	20	40	100	20

FCF201L (2 Flutes ♦ Flat Endmill ♦ Long Shank ♦ Hard Material)



Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	○	●	○	○	○	○	○	○	○	○

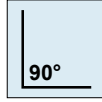
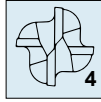
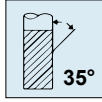
Code No.	Dc	Lc	L	d
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FCF201L-4	4	15	70	6
FCF201L-5	5	20	80	6
FCF201L-6	6	20	80	6
FCF201L-8	8	25	100	8
FCF201L-10	10	30	100	10
FCF201L-12	12	40	110	12
FCF201L-16	16	50	140	16
FCF201L-20	20	60	160	20



FCF401P (4 Flutes ♦ Flat Endmill ♦ Hard Material)

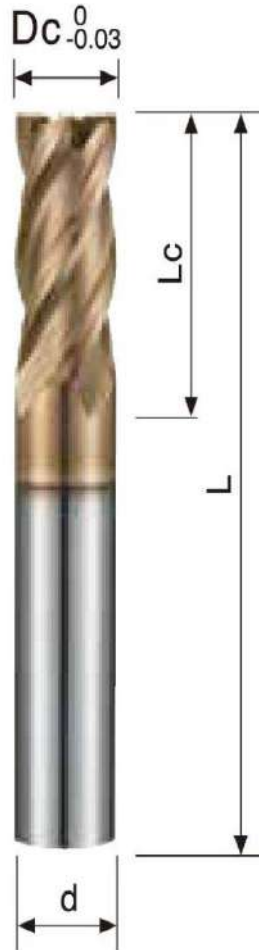
UMG
Carbide

AlTiSiN



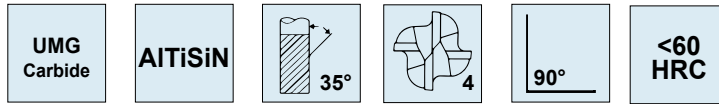
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HRC

Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Chemical Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	●	●	●	●	●	●	●	●



Code No.	Dc	Lc	L	d
FCF401P-1	1	3	50	4
FCF401P-1.5	1.5	5	50	4
FCF401P-2	2	6	50	4
FCF401P-2.5	2.5	8	50	4
FCF401P-3	3	8	50	6
FCF401P-3A	3A	8	50	4
FCF401P-3B	3B	8	50	3
FCF401P-4	4	11	50	6
FCF401P-4A	4A	11	50	4
FCF401P-5	5	13	50	6
FCF401P-6	6	16	50	6
FCF401P-8	8	20	60	8
FCF401P-10	10	25	72	10
FCF401P-12	12	30	75	12
FCF401P-14	14	32	90	16
FCF401P-16	16	40	100	16
FCF401P-18	18	40	100	20
FCF401P-20	20	40	100	20

FCF401L (4 Flutes ♦ Flat Endmill ♦ Long Shank ♦ Hard Material)

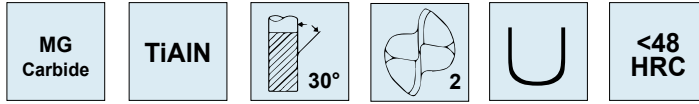


Carbon Steel	Low Alloy Steel	High Alloy Steel	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	○	○	○	○	○	○	○	○

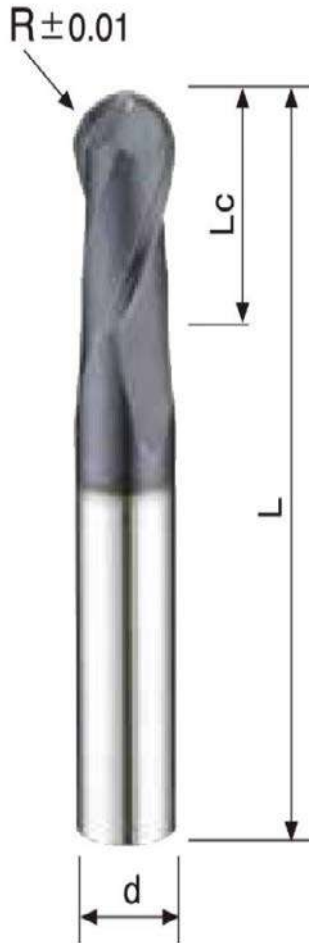
Code No.	Dc	Lc	L	d
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FCF401L-4	4	15	70	6
FCF401L-5	5	20	80	6
FCF401L-6	6	20	80	6
FCF401L-8	8	25	100	8
FCF401L-10	10	30	100	10
FCF401L-12	12	40	110	12
FCF401L-16	16	50	140	16
FCF401L-20	20	60	160	20



FCB200P (2 Flutes ♦ Ball Endmill)

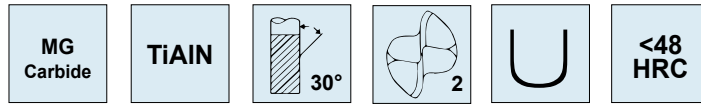


Carbon Steel	Low Alloy Steel	High Alloy Steel	Hardened Steel			Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composites	Graphite	Titanium	Nickel	Heat-Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	●	●	●	●	●	●	●



Code No.	Dc	R	Lc	L	d
FCB200P-1	1	0.5R	2	50	50
FCB200P-1.5	1.5	0.75R	3	50	50
FCB200P-2	2	1R	4	50	50
FCB200P-2.5	2.5	1.25R	5	50	50
FCB200P-3	3	1.5R	6	50	50
FCB200P-3A	3A	1.5R	6	50	50
FCB200P-3B	3B	1.5R	6	50	50
FCB200P-4	4	2R	8	50	50
FCB200P-4A	4A	2R	8	50	50
FCB200P-5	5	2.5R	10	50	50
FCB200P-6	6	3R	12	50	50
FCB200P-8	8	4R	14	60	60
FCB200P-10	10	5R	18	72	72
FCB200P-12	12	6R	22	75	75
FCB200P-16	16	8R	30	100	100
FCB200P-20	20	10R	38	100	100

FCB200L (2 Flutes ♦ Ball Endmill ♦ Long Shank)

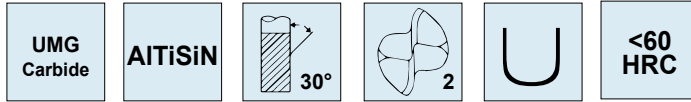


Carbon Steel	Low-Alloyed Steel	High Alloyed Steel	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-58 HRC	58-68 HRC	●	●	●	●	●	●	●	●	●	●

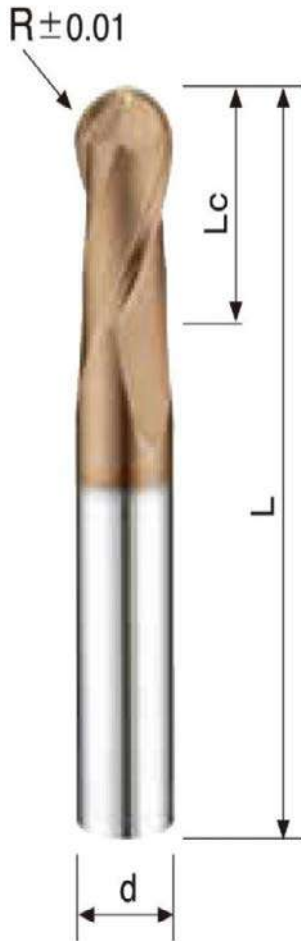
Code No.	Dc	R	Lc	L	d
FCB200L-3	3	1.5R	6	70	6
FCB200L-4	4	2R	8	70	6
FCB200L-5	5	2.5R	10	80	6
FCB200L-6	6	3R	12	80	6
FCB200L-8	8	4R	14	100	8
FCB200L-10	10	5R	18	100	10
FCB200L-12	12	6R	22	110	12
FCB200L-16	16	8R	30	140	16
FCB200L-20	20	10R	38	160	20



FCB201P (2 Flutes ♦ Ball Endmill ♦ Hard Material)

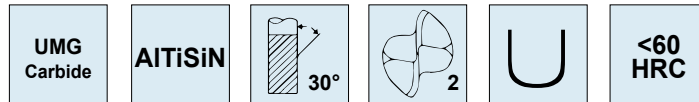


Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel				Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
			30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC										
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



Code No.	Dc	R	Lc	L	d
FCB201P-1	1	0.5R	2	50	4
FCB201P-1.5	1.5	0.75R	3	50	4
FCB201P-2	2	1R	4	50	4
FCB201P-2.5	2.5	1.25R	5	50	4
FCB201P-3	3	1.5R	6	50	6
FCB201P-3A	3A	1.5R	6	50	4
FCB201P-3B	3B	1.5R	6	50	3
FCB201P-4	4	2R	8	50	6
FCB201P-4A	4A	2R	8	50	4
FCB201P-5	5	2.5R	10	50	6
FCB201P-6	6	3R	12	50	6
FCB201P-8	8	4R	14	60	8
FCB201P-10	10	5R	18	72	10
FCB201P-12	12	6R	22	75	12
FCB201P-16	16	8R	30	100	16
FCB201P-20	20	10R	38	100	20

FCB201L (2 Flutes ♦ Ball Endmill ♦ Long Shank ♦ Hard Material)



Carbon Steel	Low Alloyed Steel	High Alloyed Steel	Hardened Steel			Stainless Steel	Cast Iron	Aluminum	Copper	Plastics	Composite Materials	Graphite	Titanium	Nickel	Heat Resistant Steel
●	●	●	30-38 HRC	38-48 HRC	48-56 HRC	56-68 HRC	●	●	●	●	●	●	●	●	●

Code No.	Dc	R	Lc	L	d
FCB201L-3	3	1.5R	6	70	6
FCB201L-4	4	2R	8	70	6
FCB201L-5	5	2.5R	10	80	6
FCB201L-6	6	3R	12	80	6
FCB201L-8	8	4R	14	100	8
FCB201L-10	10	5R	18	100	10
FCB201L-12	12	6R	22	110	12
FCB201L-16	16	8R	30	140	16
FCB201L-20	20	10R	38	160	20





TEN SOON

Users' Experience is our Priority

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