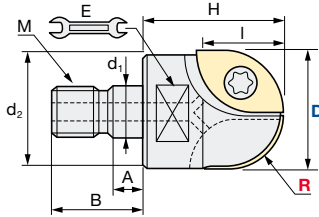
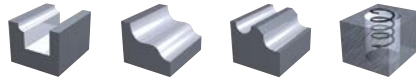




BCFM | Roughing Ball - Modular Type

Q max High Efficient	▽ Roughing	▽▽ Semi-Finishing	HRC 50	No. of Teeth 2
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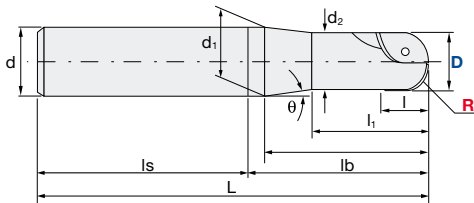
Inserts: p. 6

Diameter Holder only [mm]
0/-0.15 mm

ID Code	Item Code	Flutes	D	R	H	I	d ₁	d ₂	A	B	C	E	M	Inserts x1	Inserts x1
FH522	BCFM-20	2	20	10	38	18	10.5	17.8	5.5	19	10	15	M10	ZCEW100CE*	ZCEW100SE*
FH523	BCFM-25		25	12.5		23	12.5	20.8		22		17	M12	ZCEW125CE*	ZCEW125SE*
FH524	BCFM-32		32	16	43	28	17	28.8	6	23	12	22	M16	ZCET160CE	ZCET160SE

* or ZCET

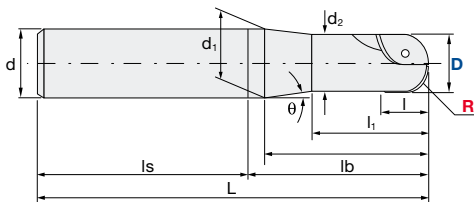
BCF-S | Roughing Ball - Short



ID Code	Item Code	Flutes	D	R	L	d	l	l ₁	l ₂	l _b	l _s	θ°	d ₁	d ₂	Inserts x1	Inserts x1
FH034	BCF-2018S25S	2	20	10	140	25	18	30	52	60	80	5.7°	23.4	19	ZCEW100CE*	ZCEW100SE*
FH040	BCF-2523S32S		25	12.5	150	32	23	35	62	70		6.5°	30.1	24	ZCEW125CE*	ZCEW125SE*
FH044	BCF-3028S32S		30	15	160		28	50	72	80		3.1°	31.2	28.8	ZCEW150CE*	ZCEW150SE*
FH383	BCF-3228S32S		32	16	-		-	-	-	-		-	-	30.6	ZCET160CE	ZCET160SE

* or ZCET

BCF-TE | Roughing Ball - Taper Necked Long Shank



ID Code	Item Code	Flutes	D	R	L	d	l	l ₁	l ₂	l _b	l _s	θ°	d ₁	d ₂	Inserts x1	Inserts x1
FH035	BCF-2018S25TE	2	20	10	250	25	18	30	72	80	170	3°	23.4	19	ZCEW100CE*	ZCEW100SE*
FH036	BCF-2018S32TE				300				107	115	185	4°9'	31.2	18	ZCEW100CE*	ZCEW100SE*
FH041	BCF-2523S32TE		25	12.5	350		23	35	97	105	195	2°8'	30.1	24	ZCEW125CE*	ZCEW125SE*
FH045	BCF-3028S32TE		30	15			28	40	92	100	250	1°3'	28.8	ZCEW150CE*	ZCEW150SE*	
FH386	BCF-3228S32TE		32	16			-	-	-	-	-	-	0°3'	31.2	30.6	ZCET160CE

* or ZCET

Parts	Clamp Screw			Wrench	
Body	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code
D 20	ET034	261-141	2.0Nm	ET011	104-T10
D 25	ET035	262-141	2.9Nm	ET012	104-T15
D 30 + D 32	ET036	263-141	4.9Nm	ET014	105-T20

- For further information about modular chucks please see our brochure *Indexable Modular Series No. 328*
- Weitere Informationen über modulare Werkzeugaufnahmen finden Sie in unserem Prospekt: *Indexable Modular Series No. 328*
- Para obtener más información sobre conos modulares consulte nuestro folleto *Indexable Modular Series No. 328*
- Per maggiori informazioni riguardanti la gamma dei mandrini avvitabili consultate il catalogo *Indexable Modular Series No. 328*

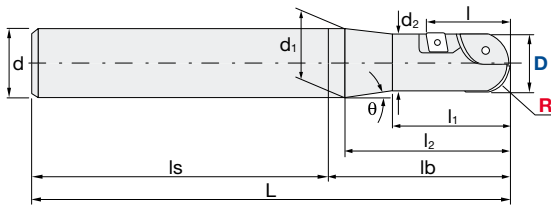
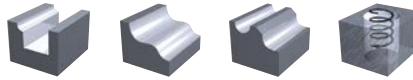
- Pour de plus amples informations concernant les attachements modulaires, voyez SVP notre brochure *Indexable Modular Series No. 328*
- Para mais informações sobre Conos Modulares consulte o nosso folheto *Indexable Modular Series No. 328*





BCF-L | Roughing Ball - Long

Q max High Efficient	▽ Roughing	▽▽ Semi-Finishing	HRC 50	No. of Teeth 2
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Inserts: p. 6

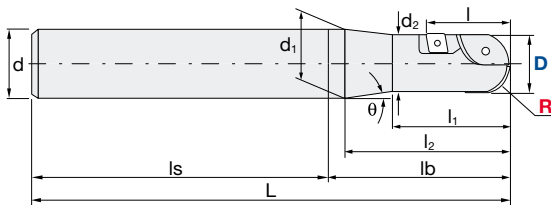


Diameter Holder only [mm]
0/-0.15 mm

ID Code	Item Code	Flutes	D	R	L	d	l	l ₁	l ₂	lb	ls	θ°	d ₁	d ₂	Inserts x1	Inserts x1	Inserts x2
FH038	BCF-2030S25L	2	20	10	150	25	30	35	62	70	80	5.3°	24	18.5	ZCEW100CE*	ZCEW100SE*	CPMT080204
FH043	BCF-2539S32L		25	12.5	180	39	50	72	80	100	9.7°	31	23.5	ZCEW125CE*	ZCEW125SE*	CPMT090308	
FH047	BCF-3043S32L		30	15	200	43	60	92	100	100	2.7°	31	28	ZCEW150CE*	ZCEW150SE*	CPMT090308	
FH384	BCF-3243S32L		32	16	200	-	-	-	100	100	-	30.3	-	ZCET160CE	ZCET160SE	CPMT090308	
FH363	BCF-4050S42L		40	20	250	50	-	-	150	150	-	38.6	-	ZCEW200CE	ZCEW200SE	CPMT090308	

* or ZCET

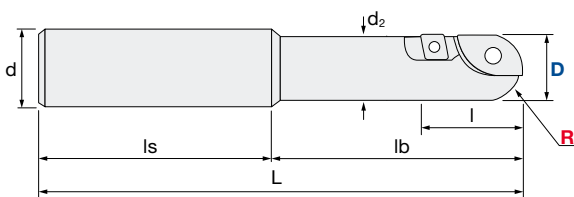
BCF-E | Roughing Ball - Extra Long



ID Code	Item Code	Flutes	D	R	L	d	l	l ₁	l ₂	lb	ls	θ°	d ₁	d ₂	Inserts x1	Inserts x1	Inserts x2
FH037	BCF-2030S25E	2	20	10	250	25	30	35	62	70	180	5.2°	24	18.5	ZCEW100CE*	ZCEW100SE*	CPMT080204
FH039	BCF-2030S32E		25	12.5	300	39	50	72	80	220	12.4°	30.4	18.5	ZCEW100CE*	ZCEW100SE*	CPMT080204	
FH042	BCF-2539S32E		30	15	300	43	60	92	100	250	9.7°	31	23.5	ZCEW125CE*	ZCEW125SE*	CPMT090308	
FH046	BCF-3043S32E		30	15	350	43	60	92	100	250	2.7°	31	28	ZCEW150CE*	ZCEW150SE*	CPMT090308	
FH385	BCF-3243S32E		32	16	350	-	-	-	100	250	-	30.3	-	ZCET160CE	ZCET160SE	CPMT090308	

* or ZCET

BCF-ST | Roughing Ball - Straight Neck Long Shank



ID Code	Item Code	Flutes	D	R	L	d	l	lb	ls	d ₂	Inserts x1	Inserts x1	Inserts x2
FH439	BCF-2030S20ST080	2	20	10	180	20	30	80	100	18.5	ZCEW100CE*	ZCEW100SE*	CPMT080204
FH440	BCF-2030S20ST150				250			150					
FH441	BCF-2539S32ST100		200	39	100	23.5	ZCEW125CE*	ZCEW125SE*		CPMT090308			
FH442	BCF-2539S32ST150		250		150								
FH487	BCF-3243S32ST100		200	43	100	30	ZCET160CE	ZCET160SE		CPMT090308			
FH488	BCF-3243S32ST200		300		200								

* or ZCET

Parts	Clamp Screw R Insert			Clamp Screw Peripheral Insert			Wrench R Insert		Wrench Peripheral Insert	
Body	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code	ID Code	Item Code
D 20	ET034	261-141	2.0Nm	ET033	251-141	1.1Nm	ET011	104-T10	ET013	104-T8
D 25	ET035	262-141	2.9Nm	ET035	262-141	2.9Nm	ET012	104-T15	ET012	104-T15
D 30	ET036	263-141	4.9Nm	ET035	262-141	2.9Nm	ET014	105-T20	ET012	104-T15
D 32	ET036	263-141	4.9Nm	ET035	262-141	2.9Nm	ET014	105-T20	ET012	104-T15
D 40	ET150	571-141A	9.8Nm	ET035	262-141	2.9Nm	ET167	105-T30A	ET012	104-T15



BCF-MT | Roughing Ball - MT Shank

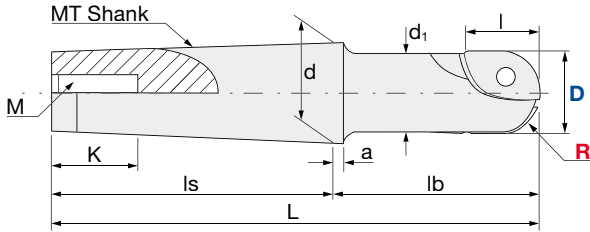
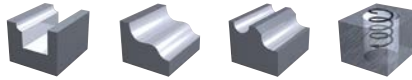
Q max
High Efficient

▽
Roughing

▽▽
Semi-Finishing

HRC
50

No. of Teeth
2



Inserts: p. 6



Diameter Holder only [mm]
0/-0.15 mm

ID Code	Item Code	Flutes	D	R	I	MT	L	lb	ls	d	d ₁	a	K	M	Inserts x1	Inserts x1	Inserts x2
FH443	BCF-20MT2	2	20	10	18	MT2	129	65	64	17.78	19	5	24	M10	ZCEW100CE*	ZCEW100SE*	
FH444	BCF-25MT3		25	12.5	23	MT3	166	85	81	23.825	24		28	M12	ZCEW125CE*	ZCEW125SE*	
FH445	BCF-32MT4		32	16	28	MT4	217.5	115	102.5	31.267	30.6	6.5	32	M16	ZCET160CE	ZCET160SE	
FH446	BCF-40MT5		40	20	50	MT5	226	96.5	129.5	44.399	38.6		40	M20	ZCEW200CE	ZCEW200SE	CPMT090308

* or ZCET

Parts BCF			Clamp Screw			Clamp Screw Peripheral Insert			Wrench		Wrench Peripheral Insert	
Body	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code	ID Code	Item Code	ID Code	Item Code
BCF-20MT2	ET034	261-141	2.s0Nm	-	-	-	ET011	104-T10	-	-	-	-
BCF-25MT3	ET035	262-141	2.9Nm	-	-	-	ET012	104-T15	-	-	-	-
BCF-32MT4	ET036	263-141	4.9Nm	-	-	-	ET014	105-T20	-	-	-	-
BCF-40MT5	ET150	571-141A	9.8Nm	ET035	262-141	2.9Nm	ET167	105-T30A	ET012	104-T15	-	-

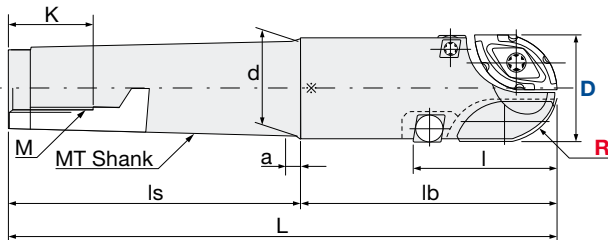
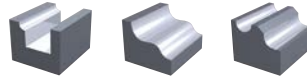
BCU | Roughing Ball - Heavy Roughing MT Shank

Q max
High Efficient

▽
Roughing

HRC
50

No. of Teeth
2



Diameter Holder only [mm]
0/-0.15 mm

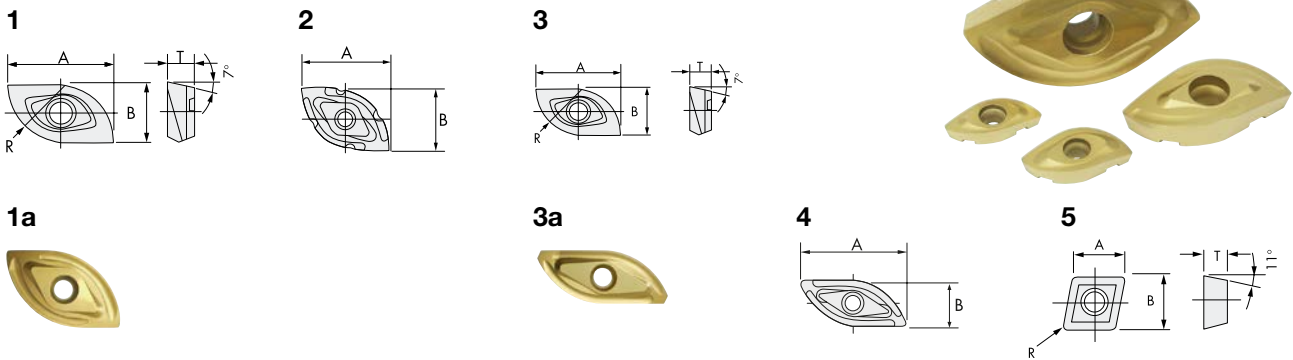
ID Code	Item Code	Flutes	D	R	I	MT	L	lb	ls	d	a	K	M	Inserts x1	Inserts x1	Inserts x2
FH362	BCU-5063SMT5	2	50	25	63	MT5	236	100	136	44.741	6.5	52.5	M20	ZCET250CE	ZCET250SK	CPMT120408
FH364	BCU-5063LMT5						286	150						ZCET250CE	ZCET250SK	CPMT120408

* or ZCET

Parts BCU			Clamp Screw R Insert			Clamp Screw Peripheral Insert			Wrench R Insert		Wrench Peripheral Insert	
Body	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code	Fastening Torque [Nm]	ID Code	Item Code	ID Code	Item Code	ID Code	Item Code
BCU-5063SMT5 BCU-5063LMT5	ET150	571-141A	9.8Nm	ET037	263-143	4.9Nm	ET167	105-T30A	ET014	105-T20	-	-



INSERTS | Roughing Ball



ID Code	Item Code	Grade	C-Coated		G-Coated	R	I(A)	T	W(B)	Figure
			CY250	CY9020	HC844					
WF583	ZCET100CE	CY9020		●		10	18.3	4.74	10	1a
WF132	ZCEW100CE	HC844			●					1
WF588	ZCET100SE	CY9020		●			16.7	4.24	8.1	3a
WF135	ZCEW100SE	HC844			●					3
WF584	ZCET125CE	CY9020		●		12.5	23.1	6.1	12.3	1a
WF138	ZCEW125CE	HC844			●					1
WF589	ZCET125SE	CY9020		●			20.8	5.4	9.3	3a
WF141	ZCEW125SE	HC844			●					3
WF585	ZCET150CE	CY9020		●		15	28.3	7.59	14.9	1a
WF144	ZCEW150CE	HC844			●					1
WF590	ZCET150SE	CY9020		●			25.7	7.09	11.8	3a
WF147	ZCEW150SE	HC844			●					3
WF586	ZCET160CE	CY9020		●		16	28.8	7.45	15.4	1a
WF539	ZCET160CE	HC844			●					1a
WF591	ZCET160SE	CY9020		●			26.3	6.96	12.4	3a
WF540	ZCET160SE	HC844			●					3a
WF514	ZCEW200CE	HC844			●	20	35.4	8	20.1	1
WF515	ZCEW200SE	HC844			●		31.9	7	15.7	3
WF587	ZCET250CE	CY250	●			25	38.8	-	26	2
WF512	ZCET250CE	HC844			●					
WF592	ZCET250SK	CY250	●				45.03	-	18.95	4
WF513	ZCET250SK	HC844			●					
WF025	CPMT080204	HC844			●	0.4	7.94	2.38	7.94	5
WF034	CPMT090308	HC844			●	0.8	9.525	3.18	9.525	5
WF041	CPMT120408	HC844			●	0.8	12.7	4.76	12.7	5

● = Available insert and grade combination