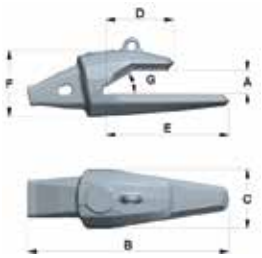
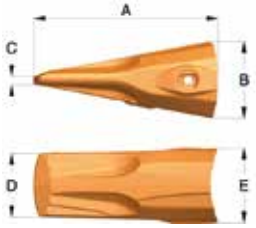
R10 SPECIFICATIONS Teeth, Adapters, Accessories

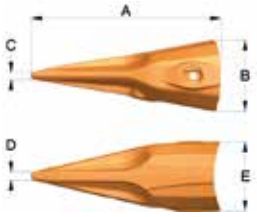


BE

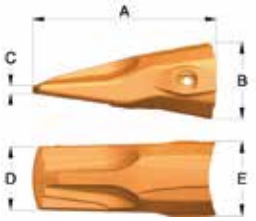
SL



GPE

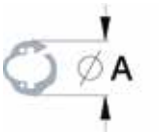


VE



GPL

LP



LR

LT

Typical machine weight - Excavator	*12-14 MT*
Maximum breakout force in HD/XHD	*88 kN*
Typical machine weight - Loader	*12-14 MT*
Maximum breakout force in HD/XHD	*158 kN*

Type	Part. no	A mm	B mm	C mm	D mm	E mm	F mm	G bevel	Weight kg
BE	R10BE25	27	281	83	95	171	90	30°	5.5
SL	R10SL20	20 (20-30)	278	83	N/A	N/A	88	25°	6.2
GPE	R10GPE	208	86	10	72	84			3.2
VE	R10VE	228	86	8	10	84			2.7
GPL	R10GPL	208	86	9	72	84			3.5
LP	R10LP	19	69						0.1
LR	R10LR	29							-
LT	R10LT	358	62						0.4

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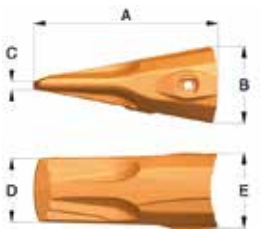
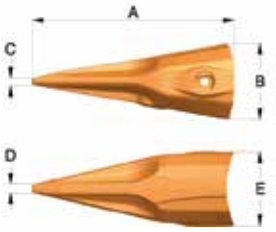
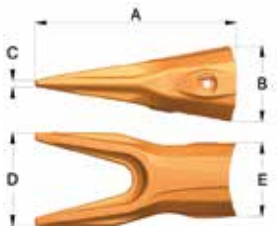
R14 SPECIFICATIONS Teeth



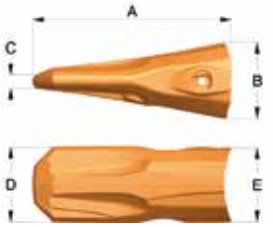
GPE



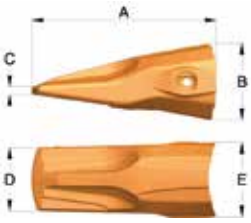
VE



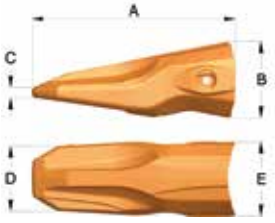
WE



AE



GPL



AL

Typical machine weight - Excavator *14-17 MT*
Maximum breakout force in HD/XHD *112 kN*

Typical machine weight - Loader *14-17 MT*
Maximum breakout force in HD/XHD *202 kN*

Type	Part. no	A mm	B mm	C mm	D mm	E mm	F mm	G bevel	Weight kg
GPE	R14GPE	240	100	11	83	97			4.7
VE	R14VE	265	100	9	10	97			4.3
WE	R14WE	265	100	9	123	97			5.1
AE	R14AE	262	100	18	98	97			6.2
GPL	R14GPL	240	100	10	83	97			5.5
AL	R14AL	269	100	15	85	97			7.3

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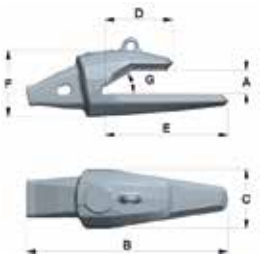
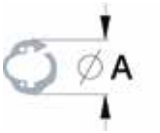
R14 SPECIFICATIONS Adapters, Accessories



BE

SL

LP



LR

LT

Type	Part. no			A mm	B mm	C mm	D mm	E mm	F mm	G bevel	Weight kg
BE	R14BE30			32	325	96	110	198	103	30°	8.7
BE	R14BE40			42	325	96	110	198	103	30°	8.7
SL	R14SL30			30 (30-40)	322	96	N/A	N/A	101	25°	9.5
LP	R14LP			22	80						0.2
LR	R14LR			32							-
LT	R14LT			383	65						0.6

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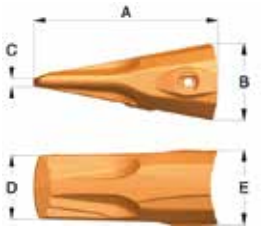
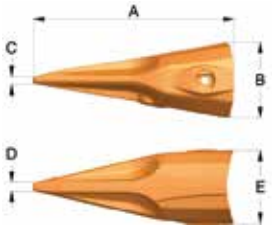
R18 SPECIFICATIONS Teeth



GPE



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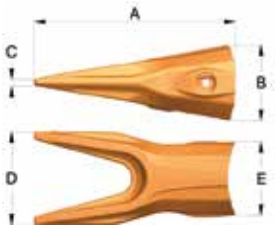

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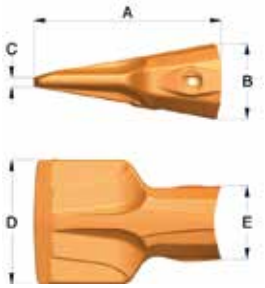
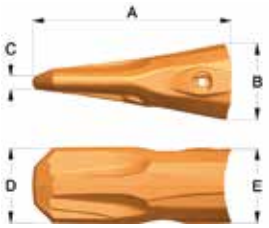


FE



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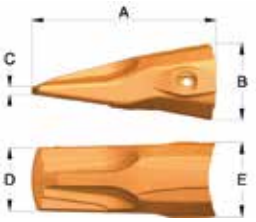
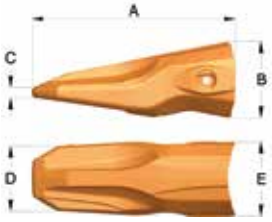


GPL



AL

Typical machine weight - Excavator *17-25 MT*
Maximum breakout force in HD/XHD *147 kN*

Typical machine weight - Loader *17-25 MT*
Maximum breakout force in HD/XHD *265 kN*

Type	Part. no	A mm	B mm	C mm	D mm	E mm	Weight kg
GPE	R18GPE	267	111	12	92	108	6.6
VE	R18VE	294	111	11	11	108	5.8
WE	R18WE	294	111	11	137	108	7.0
FE	R18FE	273	111	14	182	108	9.1
AE	R18AE	290	111	20	109	108	8.5
GPL	R18GPL	267	111	11	92	108	7.5
AL	R18AL	298	111	17	94	108	10.0

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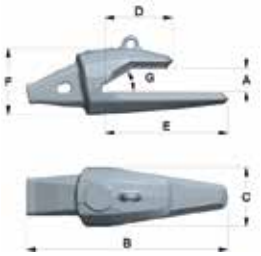
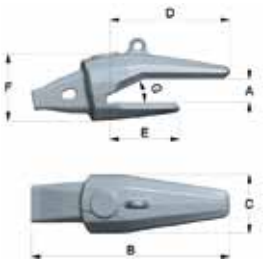
R18 SPECIFICATIONS Adapters, Accessories



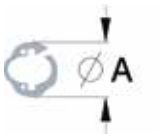
BE

SL



TL

LP



LR

LT

Type	Part. no			A mm	B mm	C mm	D mm	E mm	F mm	G bevel°	Weight kg
BE	R18BE40			42	361	106	120	220	119	30°	11.9
BE	R18BE45			47	362	106	119	221	119	30°	12.1
SL	R18SL30			30 (30-40)	357	106	N/A	N/A	114	25°	12.8
TL	R18TL40			42	356	106	215	125	121	25°	12.8
LP	R18LP			25	90						0.2
LR	R18LR			35							-
LT	R18LT			408	65						0.6

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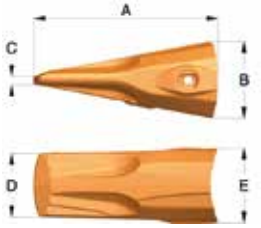
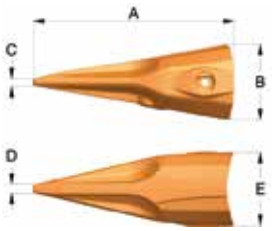
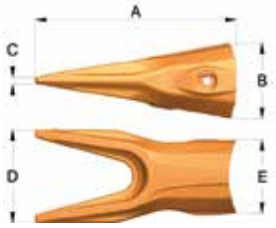
R23 SPECIFICATIONS Teeth



GPE



VE



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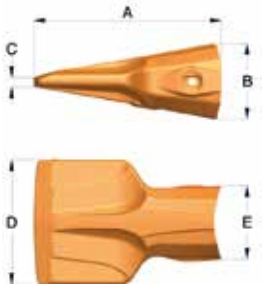

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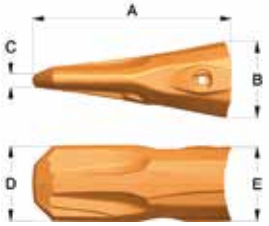
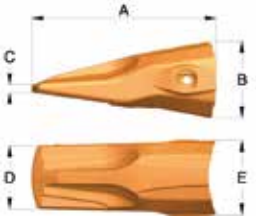
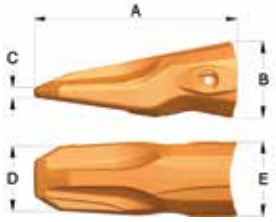


AE



GPL



AL

Typical machine weight - Excavator *25-35 MT*
Maximum breakout force in HD/XHD *184 kN*

Typical machine weight - Loader *25-35 MT*
Maximum breakout force in HD/XHD *331 kN*

Type	Part. no	A mm	B mm	C mm	D mm	E mm	Weight kg
GPE	R23GPE	301	125	14	104	122	9.6
VE	R23VE	332	125	12	13	122	8.4
WE	R23WE	332	125	12	155	122	10.1
FE	R23FE	309	125	16	205	122	13.1
AE	R23AE	328	125	22	123	122	12.4
GPL	R23GPL	301	125	13	104	122	10.8
AL	R23AL	337	125	19	107	122	14.4

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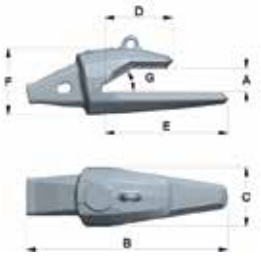
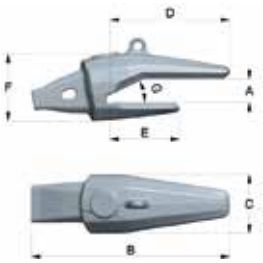
R23 SPECIFICATIONS Adapters, Accessories



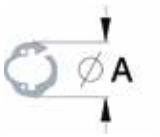
BE

SL



TL

LP



LR

LT

Type	Part. no	A mm	B mm	C mm	D mm	E mm	F mm	G bevel	Weight kg
BE	R23BE40	42	408	120	137	249	130	30°	17.5
BE	R23BE50	52	408	120	137	249	130	30°	17.3
SL	R23SL40	40 (40-50)	404	120	N/A	N/A	127	25°	18.3
TL	R23TL40	42	403	120	244	140	130	25°	18.3
LP	R23LP	28	102						0.3
LR	R23LR	40							-
LT	R23LT	435	69						0.9

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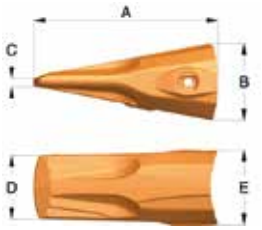
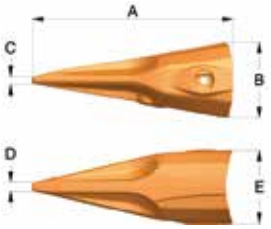
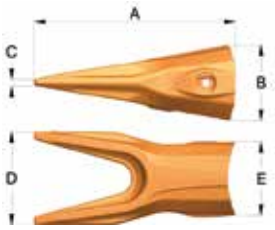
R29 SPECIFICATIONS Teeth



GPE



VE



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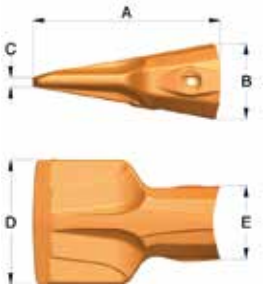

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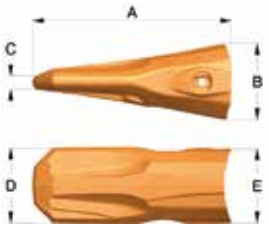
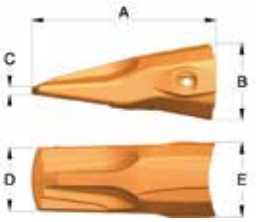
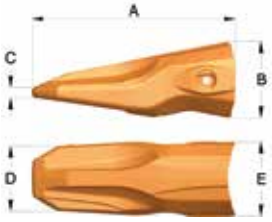


AE



GPL



AL

Typical machine weight - Excavator *35-45 MT*
Maximum breakout force in HD/XHD *233 kN*

Typical machine weight - Loader *35-45 MT*
Maximum breakout force in HD/XHD *419 kN*

Type	Part. no	A mm	B mm	C mm	D mm	E mm	Weight kg
GPE	R29GPE	331	138	15	115	134	12.6
VE	R29VE	365	138	13	14	134	11.4
WE	R29WE	365	138	13	170	134	13.5
FE	R29FE	340	138	18	226	134	17.4
AE	R29AE	361	138	24	136	134	16.2
GPL	R29GPL	331	138	14	115	134	14.5
AL	R29AL	371	138	21	117	134	19.2

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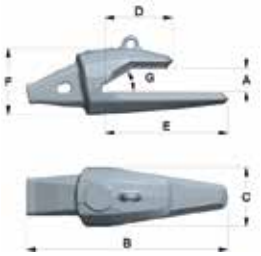
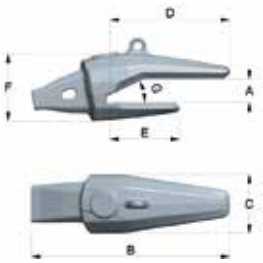
R29 SPECIFICATIONS Adapters, Accessories



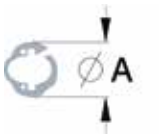
BE

SL



TL

LP



LR

LT

Type	Part. no	A mm	B mm	C mm	D mm	E mm	F mm	G bevel	Weight kg
BE	R29BE50	52	449	132	150	274	148	30°	23.7
BE	R29BE60	62	449	132	148	274	148	30°	23.2
SL	R29SL50	50 (50-65)	444	132	N/A	N/A	144	25°	21.0
TL	R29TL50	52	443	132	268	156	150	25°	24.6
LP	R29LP	31	112						0.4
LR	R29LR	43							-
LT	R29LT	460	70						1.0

Combi Wear Parts AB
Hantverkargatan 3, Box 205
SE-681 24 Kristinehamn, Sweden
Tel: +46 550 410 550. Fax: +46 550 410 589
www.combiwearparts.com

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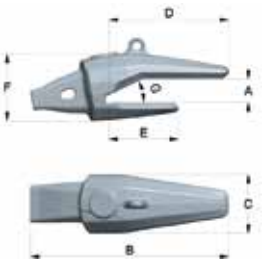
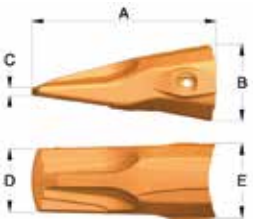
R35 SPECIFICATIONS Teeth, Adapters, Accessories



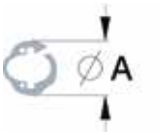
TL



GPL

AL

LP



LR

LT

Typical machine weight - Loader *45-55 MT*
Maximum breakout force in HD/XHD *510 kN*

Type	Part. no	A mm	B mm	C mm	D mm	E mm	F mm	G bevel	Weight kg
TL	R35TL65	67	501	149	303	174	170	30°	30.6
GPL	R35GPL	375	156	16	130	151			20.9
AL	R35AL	419	156	23	133	151			27.8
LP	R35LP	34	127						0.6
LR	R35LR	49							-
LT	R35LT	485	75						1.1

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www.combiwearparts.com

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EXCAVATOR TEETH AND ADAPTERS

markant.se TS C-rex 001 EN

ADAPTER

BE	SL
A 1 1/2 bottom leg adapter. Designed for both general and tough excavation in different types of ground.	Top mounted single leg adapter designed for use in general conditions whenever a smooth surface is required.

LOCK

LP	LR
Reusable locking pin of forged steel also usable in hot slag applications.	Locking ring integrated in the tooth. Secures the locking function and simplifies teeth exchange.

TOOTH

GPE	VE	WE	FE
Standard tooth with slim design for optimal penetration and durability in general purpose applications.	The tooth for maximum penetration. Makes light work of hard surface layers and frozen ground.	Used primarily in a corner position in combination with VE, this tooth provides the penetration demanded by hard surfaces.	An extra-wide tooth for excavating and cleaning – penetration and straight-edge performance from a single solution.

TOOTH

AE
Abrasion tooth for highly abrasive soils and rocks such as granite, basalt and sandstone. The design provides maximal wear material with maintained good penetration.

TOOL

LT
Tool for turning the locking ring in locked and unlocked position.

Combi Wear Parts AB
Hantverkargatan 3, Box 205
SE-681 24 Kristinehamn, Sweden
Tel: +46 550 410 550. Fax: +46 550 410 589
www.combiwearparts.com

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LOADER TEETH AND ADAPTERS

ADAPTER

SL	TL
Top mounted single leg adapter designed for use in general conditions whenever a smooth surface is required.	A 1 1/2 top leg adapter. Designed for both general and tough loading in different types of ground conditions.

LOCK

LP	LR
Reusable locking pin of forged steel also usable in hot slag applications.	Locking ring integrated in the tooth. Secures the locking function and simplifies teeth exchange.

TOOTH

GPL	AL
In both general and highly abrasive environments. This all-round tooth is popular for its excellent penetration.	Outstanding wear resistance combined with a high level of penetration. This tooth provides extra protection for the lower part of the adapter and is ideal where ground conditions are highly abrasive.

TOOL

LT
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APPLICATION TABLE

APPLICATION TABLE Based on DIN 18300 ground classfication

Ground classification	Description of ground conditions	Working conditions	Application
Class 1 Top soil without stones	Top layer of soil.	Very little wear. Very little penetration resistance. No impact resistance.	GP
Class 2 Wet ground	Sludge, mud, peat.	Little wear. Very little penetration resistance. No impact resistance.	GP
Class 3 Light ground	Sand, fine gravel, sandy soil. Stone size up to approx. 60 mm	Moderate wear. Little penetration resistance. No impact resistance.	GP
Class 4 Moderately heavy ground	Very stony ground, gravel, stones. Stone size above 60 mm.	Considerable wear. Some penetration resistance. Moderate impact resistance.	GP / HD
Class 5 Dense, moderately heavy ground	Till, rigid clay, sand-clay mix, moraine, marl.	Considerable wear. Moderate penetration resistance. Little impact, some break through resistance.	HD
Class 6 Dense, heavy ground	Hard marl and clay, hard sandy ground, hard stony soil. Stone size up to approx. 200 mm.	Considerable wear. Considerable penetration resistance. Considerable impact and break through resistance.	HD
Class 7 Lighter rock	Loose rock, crumbled rock, slate. Very hard ground with stones, approx. 200 mm or bigger.	Usually considerable wear. Considerable penetration resistance. Considerable impact and break through resistance.	XHD
Class 8 Heavy rock	Blasted rock, size over 0,1 m^3.	Very significant wear. Considerable penetration resistance. Very significant impact and break through resistance.	XHD

For further information on welding, assembly and maintenance, see welding and assembly instructions.

Breakout force diagram – Backhoe

HD/XHD class 6-8

R29	233 kN
R23	184 kN
R18	147 kN
R14	112 kN
R10	88 kN

GP/HD class 1-5

R29	291 kN
R23	230 kN
R18	184 kN
R14	140 kN
R10	110 kN

Breakout force diagram

HD/XHD class 6-8

R35	510 kN
R29	419 kN
R23	331 kN
R18	265 kN
R14	202 kN
R10	158 kN

GP/HD class 1-5

R35	637 kN
R29	524 kN
R23	414 kN
R18	331 kN
R14	252 kN
R10	198 kN

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