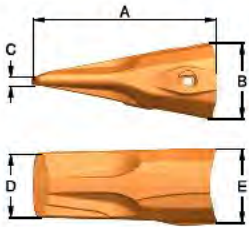
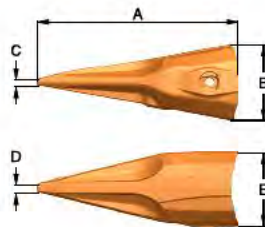


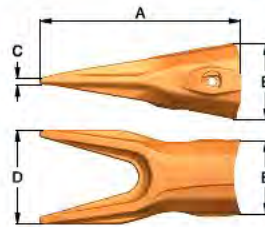
R29 SPECIFICATIONS Teeth



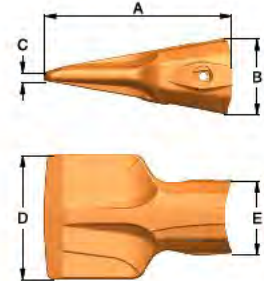
GPE



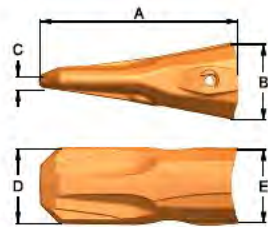
VE



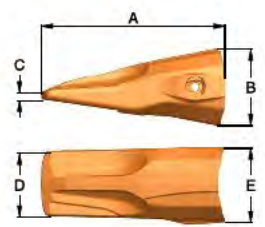
WE



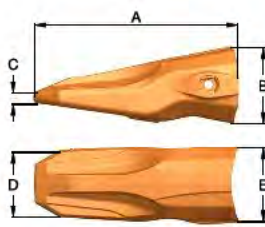
FE



AE



GPL



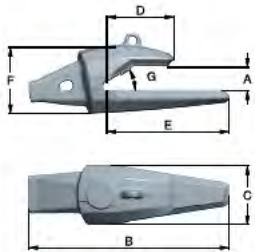
AL

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



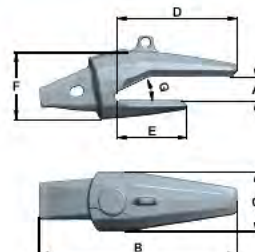
R29 SPECIFICATIONS Adapters, Accessories



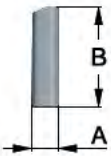
BE



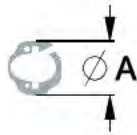
SL



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



EXCAVATOR TEETH AND ADAPTERS

ADAPTER

BE

Standard bottom leg adapter. Low profile design, improved flow of material in and out of bucket.

BME

Bottom leg adapter with a mechanical wear cap. The top of the adapter is well protected against excess wear.

WEAR CAP

CM

Mechanical wear cap protects the adapter top side in high abrasion and impact applications.

LOCK

SL

Standard lock provides easy and secure tooth replacement. The vulcanized rubber core provides a strong and tight fit.

ML

Mechanical lock for safer mounting and dismounting procedure

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.

PE

Penetration tooth with added body mass and narrow tip combines penetration with impact and abrasion resistance.

GPE

Standard tooth with slim design for optimal penetration and durability in general purpose applications.

WE

Penetration tooth for hard surface layers and compact terrain.

TOOL

T

Tool for mounting and dismounting the locking device. Simplifies the change of teeth and is recommended for safety reasons.



LOADER TEETH AND ADAPTERS

ADAPTER

TL

Standard top leg adapter. Low profile design, improved flow of material in and out of bucket.

MTL

Top leg adapter with a mechanical wear cap. The top of the adapter is well protected against excess wear.

WEAR CAP

CM

Mechanical wear cap protects the adapter top side in high abrasion and impact application.

LOCK

SL

Standard lock provides easy and secure tooth replacement. The vulcanized rubber core provides a strong and tight fit.

ML

Mechanical lock for safer mounting and dismounting procedure

TOOTH

AL

Standard tooth which offers good penetration. Optimal in both general and highly abrasive environments.

XAL

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

T

Tool for mounting and dismounting the locking device. Simplifies the change of teeth and is recommended for safety reasons.



SHROUDS EXCAVATOR & LOADER

LIP SHROUD

MSC	MSL	MSR	MSP
<p>Mechanical lip shroud Center</p> <p>For straight edges and for use in combination with MSL & MSR on spade nose buckets. Provides full lip protection between adapters in abrasive applications.</p>	<p>Mechanical lip shroud Left*</p> <p>15° angle for delta and spade nose buckets.</p> <p>* Left from excavating direction.</p>	<p>Mechanical lip shroud Right*</p> <p>15° angle for delta and spade nose buckets.</p> <p>* Right from excavating direction.</p>	<p>Mechanical shroud protector designed to protect the locking device and the backside of the shrouds.</p>

RAIL	LOCKING PARTS	SIDE SHROUD	PIN AND RING
<p>WSR</p> <p>Welded on shroud rail holds the lip shrouds in secure position.</p>	<p>Shroud Lock, Bolt and Washer</p> <p>Self tightening lock, bolt and washer for the mechanical shroud.</p>	<p>SSM</p> <p>Mechanical side shroud is used to protect the bucket side plates and fastened with pin and ring.</p>	<p>PIN AND RING</p> <p>Locking pin and ring for the side shroud.</p>

HEEL SHROUD

WHS
<p>Welded on heel shroud provides excellent wear protection of the lower outside corner of all types of buckets.</p>

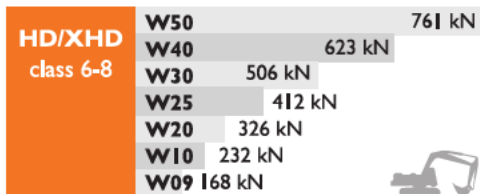


APPLICATION TABLE

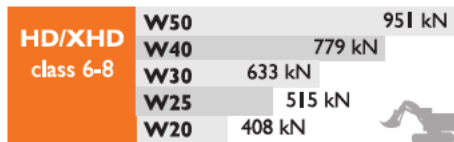
APPLICATION TABLE Based on DIN 18300 ground classification			
Ground classification	Description of ground conditions	Working conditions	Application
Class 1 Top soil without stones	Top layer of soil.	Very little wear. Very little penetration resistance. No impact resistance.	GP
Class 2 Wet ground	Sludge, 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



Breakout force diagram – Face shovel



Breakout force diagram

