



# **Class 0.5 - 12t** *1,100 - 26,400lbs*

## **Attachments for Excavators**

General Construction
Landscaping
Forestry
Utilities, Oil and Gas
Waste Management







































#### 23 companies, 11 brands, more than 4,000 products

The Kinshofer Group is one of the world's leading designers and manufacturers of attachments for construction machinery, such as excavators, backhoe loaders, skidsteer loaders, knuckle boom cranes and forklift trucks. The Kinshofer Group is a One-Stop-Attachment-Shop to our customers around the globe.

Day in and day out, all year 'round, people's decisions and needs create demand for transport and infrastructure solutions. Without the type of product and services the Kinshofer Group provides, the societies, where many of us live, would not function.

Find a wide range of attachments for excavators here and even more on our website kinshofer.com

Simply moving the world with us.











### **Contents**

	page
Quick Couplers up to 12t / 26,400lbs	F
Mechanic and hydraulic Quick Couplers System L-Lock  Mechanic and hydraulic Quick Couplers System S-Lock	5 6
Tilt Couplers up to 14t / 30,800/bs	0
Mechanic and hydraulic Tilt Couplers System L-Lock	7 et seg
Mechanic and hydraulic Tilt Couplers System S-Lock	9
Rotary Couplers up to 10t / 22,000/bs	,
Rotary Couplers System L-Lock	10
Rotary Couplers System S-Lock	11
Additional Accessories for Quick Couplers, Tilt Couplers & Rotary Couplers	12
NOX Tiltrotators up to 11t / 24,200lbs	13 et seq
Attachments for <b>NOX</b> Tiltrotators	
Multi Purpose Grabs with hydraulic cylinder or <b>HPXdrive</b> : A-Series	16
Demolition and Sorting Grabs with hydraulic cylinder or <b>HPXdrive</b> : D-Series	17
4-Grip for Demolition and Sorting Grabs and Multi Purpose Grabs	18
Clamshell Buckets with <b>HPXdrive</b> : C-Series	19
Fork Tines: GAF, GAH	20
Levelling Bar: AVB	21
Compactor Wheel: KRC	22
Grading Buckets: SKP	23
Cabel Buckets: SKK	24
Buckets up to 12t / 26,400lbs	
General Buckets: GB-L System L-Lock	25
Ditch Cleaning Buckets: DC-L System L-Lock	26
Tilt Buckets: TB-L System L-Lock	27
Selector Buckets: SB-L System L-Lock	28
Screening Buckets: VMS	29
Cone Crusher	30
Multi Purpose Grabs up to 12t / 26400lbs	
up to 9t / 19,800lbs operating weight with hydraulic cylinder: A02H, A04H, A06H, A09H	31 et seq
up to 9t / 19,800lbs operating weight with <b>HPXdrive</b> : A02HPX, A04HPX, A06HPX, A09HPX	33 et seq
4-Grip for Demolition and Sorting Grabs and Multi Purpose Grabs	35
Barrier Lifter: KM 932MB	36
up to 12t / 26,400/bs operating weight with hydraulic cylinder: A12H	37
Demolition and Sorting Grabs up to 12t / 26,400/bs	20.1
up to 9t / 19,800lbs operating weight with hydraulic cylinder: D02H, D04H, D06H, D09H	38 et seq
up to 9t / 19,800lbs operating weight with <b>HPXdrive</b> : D02HPX, D04HPX, D06HPX, D09HPX	40 et seq
4-Grip for Demolition and Sorting Grabs and Multi Purpose Grabs	42
Industrial Grabs with #PXdrive: D06HPX-R, D09HPX-R	43
up to 12t / 26,400lbs operating weight with hydraulic cylinder: D12H-P	44
Mounting Options for Hydraulic Attachments - rigid mount Clamshell Buckets up to 12t / 26,400lbs	45 et seq
up to 6t / 13,200/bs operating weight with hydraulic cylinder: C02H, C03H, C05H, C08H	47 et seg
up to 9t / 19,800/bs operating weight with hydraulic cylinder. Co2rt, Co3rt, Co3rt, Co3rt, Co3rt	•
up to 9t / 19,800/bs operating weight with hydraulic cylinder: C08V	51 et seq 53
C-VE grabs shell exchange information	54
up to 9t / 19,800/bs operating weight with hydraulic cylinder and exchangeable shells: C08VE	55
up to 10t / 22,000/bs operating weight with hydraulic cylinder: C10H	56
C-VE grabs shell exchange information	57
up to 12t / 26,400lbs operating weight with hydraulic cylinder and exchangeable shells: C12VE	58 et seq
Additional and small parts	60
Timber Grabs up to 12t / 26,400lbs	
up to 9t / 19,800/bs operating weight with <b>HPXdrive</b> : T06HPX-3Z, T09HPX-3Z	61
up to 12t / 26,400lbs operating weight with hydraulic cylinder: T12H	62
Tree Shear up to 8t / 17,600lbs: KTC08	63
Mulchers up to 15t / 33,000/bs	64
Universal Mulchers up to 15t / 33,000lbs operating weight: KUM-Series Forestry Mulchers up to 15t / 33,000lbs operating weight: KFM-Series	64 65
Hedge Trimmers up to 8t / 17,600lbs: T150	00

### **Contents**

	page
Rock Grabs up to 9t / 19,800lbs	
Up to 9t / 19,800lbs operating weight with <b>HPXdrive</b> : R05HPX, R08HPX	67
Exchangeable Shells for HPX drive	68
Mounting Options for Hydraulic Attachments - cardanic and rigid mount	69 et seq
Earth Drills up to 15t / 33,000lbs	
Up to 5t / 11,000lbs operating weight: X1500, X2000, X2500, 3000MAX, 4500MAX and S4 Augers	73 et seq
Up to 8t / 17,600lbs operating weight: 5500MAX, 7000MAX, 8000MAX and S5 Augers	75 et seq
Up to 15t / 33,000lbs operating weight: 12000MAX, 15000MAX and S6 Augers	77 et seq
In-Site Monitor	79
Stump Planers and Log Splitter: SP, Log Splitter	80
Mounting options for Earth Drills	81
Cable Ploughs up to 12t / 26,400lbs: KPF, KPH	82
Trenchers up to 10t / 22,000lbs	
Trenchers: MT600, MT900, XHD900, XHD1200, XHD1500	83 et seq
Info and Mounting Options for Trenchers	85
Hydraulic Breakers and Accessories up to 12.5t / 27,500lbs: KSB	87 et seq
Mounting Options for Hydraulic Attachments - rigid mount	89 et seq
Rotators	91
Contact	92

The L-Lock System was designed to be fully compatible with the Lehnhoff standard. For maximum reliability, all contact surfaces of the L-Lock quick couplers are mechanically machined and therefore lock safely and without unwanted play or movement. The hydraulic versions are equipped with drop stop claws for additional safety.

- ▶ KMS-L with mechanical & KHS-L with hydraulic locking system.
- > Safe mechanic or hydraulic locking available.
- ▶ Use of robust and durable cast housings.
- ➢ All hydraulic quick couplers system L-Lock are equipped with drop stop claws as standard! The Kinshofer quick coupler systems thus fully comply with all applicable national and international standards and regulations, including Machinery Directive 2006/42/EG, DIN EN 474-1, ISO13031 and SUVA.



The hydraulic KHS+ quick couplers are characterized by a very high safety standard. The drop stop (extended quick coupler claw) prevents the attachment from falling down if the quick coupler lock is accidentally not locked properly. To further increase safety, the KHS+ quick coupler has also been equipped with the new safe lock indicator that reliably indicates proper locking. The KHS+ couplers fully comply with all applicable national and international standards and regulations, including Machinery Directive 2006/42/EG, DIN EN 474-1, ISO13031 and SUVA.

Mechanic Quick Couplers KMS-L								
Туре	Locking	Weight	Suitable	Operating weight				
		(kg/lbs)	adapter	(t/lbs)				
KMS01L	mechanic	15 / 33	KSW01	0.5 - 2.0 / 1,100 - 4,400				
KMS03L	mechanic	30 / 66	KSW03	1.5 - 6.5 / 3,300 - 14,300				
KMS08L	mechanic	75 / 165	KSW08	6.0 - 12.0 / 13,200 - 26,400				

Package consists of: mechanic quick coupler, socket

Hydraulic Quick Couplers KHS-L (including drop stop)								
Туре	Locking	Weight (kg/lbs)	Suitable adapter	Operating weight (t/lbs)				
KHS01L	hydraulic	15 / 33	KSW01	0.5 - 2.0 / 1,100 - 4,400				
KHS03L	hydraulic	30 / 66	KSW03	1.5 - 5.5 / 3,300 - 12,100				
KHS03L HD	hydraulic	31 / 68	KSW03	4.8 - 7.0 / 10,560 - 15,400				
KHS08L	hydraulic	80 / 176	KSW08	6.0 - 12.0 / 13,200 - 26,400				

Package consists of: hydraulic quick coupler with drop stop claws

Hydraulic Quick Couplers KHS-L+ (including drop stop & safe lock indicator)								
Туре	Locking	Weight (kg/lbs)	Suitable adapter	Operating weight (t/lbs)				
KHS01L+	hydraulic	16 / 35	KSW01	0.5 - 2.0 / 1,100 - 4,400				
KHS03L+	hydraulic	31 / 68	KSW03	1.5 - 5.5 / 3,300 - 12,100				
KHS03L HD+	hydraulic	32 / 70	KSW03	4.8 - 7.0 / 10,560 - 15,400				
KHS08L+	hydraulic	82 / 180	KSW08	6.0 - 12.0 / 13,200 - 26,400				

Package consists of: hydraulic quick coupler with drop stop claws and lock indicator



Safely locked. Indicator pin is driven in.



Unlocked for the couling process. Indicator pin is extended.



Not correctly locked
Locking pins are above the
permitted range.
Indicator pin is extended.

#### Requirements of carrier machine for KHS-L / KHS-L HD

KHS01L & KHS03L HD & KHS08L

**Hydraulic system:** KHS: one single-acting hydraulic circuit / KHS HD: one double-acting hydraulic circuit

**Note:** excavator needs to be equipped with quick coupler control

The S-Lock System was designed to be fully compatible with the internationally adopted S-Standard adapters. In addition to a specially engineered, centrally located locking mechanism, the S-Lock coupler features a second locking mechanism at the front pin, providing a twin lock system for maximum safety.

- > KMS-S with mechanic locking system.
- > KHS-S with hydraulic locking system.
- ▶ Safe mechanic or hydraulic locking available.
- ▶ Use of robust and durable cast housings.
- Fully compatible with the original quick coupler systems or standards.



here with hook

Mechanic Quick Couplers KMS-S								
Туре	Locking	<b>Weight</b> (kg/lbs)	Operating weight (t/lbs)					
KMS30S-150	mechanic	18 / 39.6	0.5 - 2.0 / 1,100 - 4,400					
KMS30S-180	mechanic	18 / 39.6	0.5 - 2.0 / 1,100 - 4,400					
KMS40S	mechanic	50 /121	2.0 - 6.0 / 4,400 - 13,200					
KMS45S	mechanic	90 / 198	6.0 - 11.0 / 13,200 - 24,200					
KMS50S	mechanic	88 / 194	6.0 - 11.0 / 13,200 - 24,200					

Package consists of: mechanic quick coupler, socket

Hydraulic Quick Couplers KHS-S								
Туре	Locking	Weight (kg/lbs)	Operating weight (t/lbs)					
KHS30S-150	hydraulic	15 / 33	0.5 - 2.0 / 1,100 - 4,400					
KHS30S-150	hydraulic	15 / 33	0.5 - 2.0 / 1,100 - 4,400					
KHS40S	hydraulic	50 /121	2.0 - 6.0 / 4,400 - 13,200					
KHS45S	hydraulic	90 / 198	6.0 - 11.0 / 13,200 - 24,200					
KHS50S	hydraulic	88 / 194	6.0 - 11.0 / 13,200 - 24,200					
Package consists of: hydraulic quic	k coupler							

#### Installation sets for hydraulic Quick Couplers KHS-S

Description Type

KHS03L HD-KHS08L installation set safety incl. KHS Control unit

KHS03L HD-KHS08L installation set basic incl. unlockable flip switch (hold to run)

Access	ories

Туре	Description
KM 685 06 KSW01 hook	load hook (1t / 2,200lbs load capacity) for KMS/KHS30S
KM 685 06 KSW03 hook 3t	load hook (3t / 6,600lbs load capacity) for KMS/KHS40S
KM 685 06 KSW08 hook	load hook (5t / 11,000lbs load capacity) for KMS/KHS45S and KMS/KHS50S

#### Requirements of carrier machine for KHS-S

KHS30S	/	KHS40S	/ K	HS45	5S ,	/ KHS509	ò
				111			

Hydraulic system: one double-acting hydraulic circuit

excavator needs to be equipped with quick coupler control Note:

#### Tilt Couplers System L-Lock 1-14t / 2,200-30,800lbs

TC L-Lock

The Kinshofer TC Tilt Couplers provide a tilting angle of up to 180°, increasing the flexibility and efficiency of all attachments to a maximum. Compatible with quick coupling system L-Lock. The hydraulic versions are equipped with drop stop claws for additional safety.

- ▷ Compact design, no cylinder.
- ▶ More flexibility.
- Low height thus high breakaway force.
- **▶** Low maintenance.
- All hydraulic quick couplers system L-Lock are equipped with drop stop claws as standard! The Kinshofer quick coupler systems thus fully comply with all applicable national and international standards and regulations, including Machinery Directive 2006/42/EG, DIN EN 474-1, ISO13031 and SUVA.
- ▶ Optionally available: a double unlockable non-return valve mounted to the motor provides a safe position of the TC tilt coupler across all angles, see accessories page 9.



Mechanic Tilt Couplers TC KMS-L								
Туре	Rotary drive	Tilt angle	Locking	Weight (kg/lbs)	Operating weight (t/lbs)			
TC02-180 KMS01L	RA02	2 x 90°	mechanic	38 / 83.6	1.0 - 2.0 / 2,200 - 4,400			
TC03-180 KMS03L	RA03	2 x 90°	mechanic	43 / 94.6	2.0 - 2.9 / 4,400 - 6,380			
TC045-180 KMS03L	RA045	2 x 90°	mechanic	80 / 176	2.4 - 4.5 / 5,280 - 9,900			
TC07-180 KMS03L	RA07	2 x 90°	mechanic	85 / 187	4.3 - 7.0 / 9,460 - 15,400			
TC07-180 KMS08L	RA07	2 x 90°	mechanic	130 / 286	4.3 - 7.0 / 9,460 - 15,400			
TC10-180 KMS08L	RA10	2 x 90°	mechanic	175 / 385	6.0 - 10.0 / 13,200 - 22,000			
TC14-140 KMS08L	RA14	2 x 70°	mechanic	245 / 539	8.6 - 14.0 / 18,920 - 30,800			

Package consists of: upper bracket, rotary drive, mechanic quick coupler, socket

Hydraulic Tilt Couplers TC KHS-L								
Туре	Rotary drive	Tilt angle	Locking	Weight (kg/lbs)	Operating weight (t/lbs)			
TC02-180 KHS01L	RA02	2 x 90°	hydraulic	38 / 83.6	1.0 - 2.0 / 2,200 - 4,400			
TC03-180 KHS03L	RA03	2 x 90°	hydraulic	43 / 94.6	2.0 - 2.9 / 4,400 - 6,380			
TC045-180 KHS03L	RA045	2 x 90°	hydraulic	85 / 187	2.4 - 4.5 / 5,280 - 9,900			
TC07-180 KHS03L HD	RA07	2 x 90°	hydraulic	90 / 198	4.3 - 7.0 / 9,460 - 15,400			
TC07-180 KHS08L	RA07	2 x 90°	hydraulic	140 / 308	4.3 - 7.0 / 9,460 - 15,400			
TC10-180 KHS08L	RA10	2 x 90°	hydraulic	180 / 396	6.0 - 10.0 / 13,200 - 22,000			
TC14-140 KHS08L	RA14	2 x 70°	hydraulic	250 / 550	8.6 - 14.0 / 18,920 - 30,800			

Package consists of: upper bracket, rotary drive, hydraulic quick coupler with drop stop claws

Requirements o	f carrier mach	ine for TC KHS-L

Hydraulic system:

 Quick coupler
 Rotary drive

 one single acting hydraulic circuit up to TC045 one double acting hydraulic circuit from TC07
 one double acting hydraulic circuit

Note: excavator needs to be equipped with quick coupler control



TC02-180 KHS01L here with hook and open claws



TC10-180 KHS08L here with hook and closed claws

#### Tilt Couplers System L-Lock 1.0-14t / 2,200-30,800lbs

TC L-Lock+

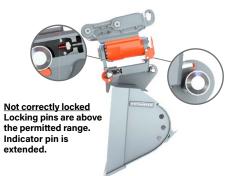
The TC L-Lock+ tilt couplers are characterized by a very high safety standard. The drop stop (extended quick coupler claw) prevents the attachment from falling down if the quick coupler lock is accidentally not closed properly, despite visual indication or warning signal. The newly developed indicator pin shows on the one hand the locking status when the bolts are in/out and on the other hand also when the locking bolts are above the approved range.

- ▶ Drop Stop: The quick coupler claw curls around the front pin of the quick change adaptor and prevents the attachment from unintenional disengagment.
- ▶ **Enormous safety:** Indicator pin shows only one correct condition of the coupling process and is independent of sensors or electronics.
- ▶ Fully comply with all applicable national and international standards and regulations, including Machinery Directive 2006/42/EG, DIN EN 474-1, ISO13031 and SUVA.
- Optionally available: a double unlockable non-return valve mounted to the motor provides a safe position of the TC tilt coupler across all angles, see accessories page 9.









Hydraulic Tilt Couplers TC KHS-L+ (including drop stop & safe lock indicator)							
Туре	Rotary drive	Tilt angle	Locking	Weight (kg/lbs)	Operating weight (t/lbs)		
TC02-180 KHS01L+	RA02	2 x 90°	hydraulic	39 / 85.8	1.0 - 2.0 / 2,200 - 4,400		
TC03-180 KHS03L+	RA03	2 x 90°	hydraulic	44 / 96.8	2.0 - 2.9 / 4,400 - 6,380		
TC045-180 KHS03L+	RA045	2 x 90°	hydraulic	86 / 189.2	2.4 - 4.5 / 5,280 - 9,900		
TC07-180 KHS03L HD+	RA07	2 x 90°	hydraulic	91 / 200.2	4.3 - 7.0 / 9,460 - 15,400		
TC07-180 KHS08L+	RA07	2 x 90°	hydraulic	142 / 312.4	4.3 - 7.0 / 9,460 - 15,400		
TC10-180 KHS08L+	RA10	2 x 90°	hydraulic	182 / 400.4	6.0 - 10.0 / 13,200 - 22,000		
TC14-140 KHS08L+	RA14	2 x 70°	hydraulic	252 / 554.4	8.6 - 14.0 / 18,920 - 30,800		

Package consists of: upper bracket, rotary drive, hydraulic quick coupler, drop stop claws and lock indicator

#### Requirements of carrier machine for TC KHS-L+

Quick coupler

Rotary drive

one single acting hydraulic circuit up to TC045 one double acting hydraulic circuit from TC07

one double acting hydraulic circuit

Note:

Hydraulic system:

excavator needs to be equipped with quick coupler control





#### Tilt Couplers System S-Lock 1.0-14t / 2,200-30,800lbs

The Kinshofer TC Tilt Couplers provide a tilting angle of up to 180°, increasing the flexibility and efficiency of all attachments to a maximum. Compatible with quick coupling system S-Lock.

- ▷ Compact design, no cylinder.
- **▶** More flexibility.
- ▶ Low height thus high breakaway force.
- **▷** Low maintenance.
- ▶ Optionally available: a double unlockable non-return valve mounted to the motor provides a safe position of the TC tilt coupler across all angles, see accessories page 9.



Mechanic Tilt Couplers TC KMS-S							
Туре	Rotary drive	Tilt angle	Locking	Weight (kg/lbs)	Operating weight (t/lbs)		
TC02-180 KMS30S-150	RA02	2 x 90°	mechanic	49 / 107.8	1.0 - 2.0 / 2,200 - 4,400		
TC02-180 KMS30S-180	RA02	2 x 90°	mechanic	49 / 107.8	1.0 - 2.0 / 2,200 - 4,400		
TC03-180 KMS40S	RA03	2 x 90°	mechanic	49 / 107.8	2.0 - 2.9 / 4,400 - 6,380		
TC045-180 KMS40S	RA045	2 x 90°	mechanic	72 / 158.4	2.4 - 4.5 / 5,280 - 9,900		
TC07-180 KMS40S	RA07	2 x 90°	mechanic	80 / 176	4.3 - 7.0 / 9,460 - 15,400		
TC07-180 KMS45S	RA07	2 x 90°	mechanic	102 / 224.4	4.3 - 7.0 / 9,460 - 15,400		
TC10-180 KMS45S	RA10	2 x 90°	mechanic	130 / 286	6.0 - 10.0 / 13,200 - 22,000		
TC14-140 KMS45S	RA14	2 x 70°	mechanic	195 / 429	8.6 - 14.0 / 18,920 - 30,800		

Package consists of: upper bracket, rotary drive, mechanic quick coupler, socket

Hydraulic Tilt Couplers TC KHS-S						
Туре	Rotary drive	Tilt angle	Locking	Weight (kg/lbs)	Operating weight (t/lbs)	
TC02-180 KHS30S-150	RA02	2 x 90°	hydraulic	49 / 107.8	1.0 - 2.0 / 2,200 - 4,400	
TC02-180 KHS30S-180	RA02	2 x 90°	hydraulic	49 / 107.8	1.0 - 2.0 / 2,200 - 4,400	
TC03-180 KHS40S	RA03	2 x 90°	hydraulic	49 / 107.8	2.0 - 2.9 / 4,400 - 6,380	
TC045-180 KHS40S	RA045	2 x 90°	hydraulic	72 / 158.4	2.4 - 4.5 / 5,280 - 9,900	
TC07-180 KHS40S	RA07	2 x 90°	hydraulic	80 / 176	4.3 - 7.0 / 9,460 - 15,400	
TC07-180 KHS45S	RA07	2 x 90°	hydraulic	102 / 224.4	4.3 - 7.0 / 9,460 - 15,400	
TC10-180 KHS45S	RA10	2 x 90°	hydraulic	130 / 286	6.0 - 10.0 / 13,200 - 22,000	
TC14-140 KHS45S	RA14	2 x 70°	hydraulic	195 / 429	8.6 - 14.0 / 18,920 - 30,800	

Package consists of: upper bracket, rotary drive, hydraulic quick coupler

Installation sets	for hydraulic <sup>·</sup>	Tilt Couplers	TC KHS-S

Туре	Description
KHS03L HD-KHS08L installation set safety KHS03L HD-KHS08L installation set basic	incl. KHS Control unit incl. unlockable flip switch

#### Accessories

Туре	Description
KM 685 06 KSW01 hook	load hook (1t / 2,200lbs load capacity) for KMS/KHS30S
KM 685 06 KSW03 hook 3t	load hook (3t / 6,600lbs load capacity) for KMS/KHS40S
KM 685 06 KSW08 hook	load hook (5t / 11,000lbs load capacity) for KMS/KHS45S and KMS/KHS50S

#### Requirements of carrier machine for TC KHS-S

	Quick coupler	Rotary drive		
Hydraulic system:	one double acting hydraulic circuit	one double acting hydraulic circuit		
Operating pressure (to be set at excavator):	210 - 300 bar / 2,610 - 3,040 psi	250 bar / 3,620 psi		
Pump capacity:	5 - 10 l/min / 1.3 - 2.5 GPM	5 - 10 l/min / 1.3 - 2.5 GPM		
Note:	excavator needs to be equipped with quick coupler control.			

#### Rotary Couplers System L-Lock 0.9-10t / 1,980-22,000lbs

**RC L-Lock** 

RC06

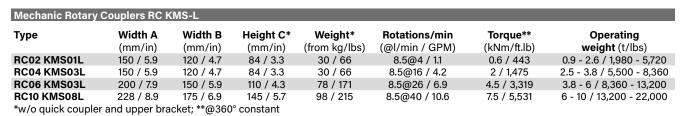
With the compact RC rotary coupler you increase the freedom of movement in the entire working area of the excavator. Thanks to the robust and low construction (it is firmly bolted to the boom), the maximum breakaway and ripping forces are achieved.

In addition to the usual movement, each attachment can be endlessly rotated by 360°. This enables more flexible and faster work without moving the excavator.

The newly gained freedom of movement allows work to be carried out more precisely, which saves additional manual work steps.

Here in combination with the proven L-Lock quick coupling system.

- All hydraulic quick couplers system L-Lock are equipped with drop stop claws as standard! The Kinshofer quick coupler systems thus fully comply with all applicable national and international standards and regulations, including Machinery Directive 2006/42/EG, DIN EN 474-1, ISO13031 and SUVA.
- Compact and low design.
- ▶ More flexibility due to 360° rotation.
- ▶ Low height thus high breakaway force.
- Low maintenance.
- ▶ Lower quick coupler with mechanic or hydraulic locking available.



Package consists of: upper bracket, rotation drive, mechanic quick coupler, socket

Hydraulic Rotary Couplers RC KHS-L (with drop stop claws)							
Туре	Width A	Width B	Height C*	Weight*	Rotations/min	Torque**	Operating
	(mm/in)	(mm/in)	(mm/in)	(from kg/lbs)	(@l/min / GPM)	(kNm/ft.lb)	weight (t/lbs)
RC02 KHS01L	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@4 / 1.1	0.6 / 443	0.9 - 2.6 / 1,980 - 5,720
RC04 KHS03L	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@16 / 4.2	2 / 1,475	2.5 - 3.8 / 5,500 - 8,360
RC06 KHS03L HD	200 / 7.9	150 / 5.9	110 / 4.3	78 / 171	8.5@26 / 6.9	4.5 / 3,319	3.8 - 6 / 8,360 - 13,200
RC10 KHS08L	228 / 8.9	175 / 6.9	145 / 5.7	98 / 215	8.5@40 / 10.6	7.5 / 5,531	6 - 10 / 13,200 - 22,000
*w/o quick coupler and	d upper brack	et; **@360°	constant				

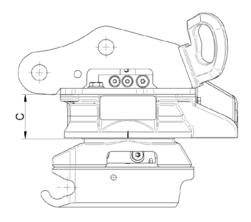
Package consists of: upper bracket, rotation drive, hydraulic quick coupler with drop stop claws

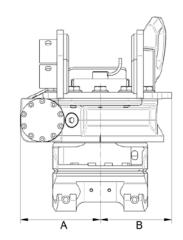
Technical data and hydraulics RC								
Туре	Breakout force max. (ISO) (kN/kNm / lbf/ft.lb)	Bucket width max. (mm/in)	Recommended oil flow rotate (I/min / GPM)	Hydraulic pressure rotate max. (bar/psi)				
RC02	28/20 / 6,160/14,750	800 / 31.5	3 - 4 / 0.8 - 1.1	175 / 2,520				
RC04	32/23 / 7,040/16,963	1,100 / 43.3	6 - 16 / 1.6 - 4.2	175 / 2,520				
RC06	43/35 / 9,460/25,813	1,200 / 47.2	18 - 26 / 4.8 - 6.9	250 / 3,600				
RC10	75/79 / 16,500/58,263	1,600 / 63	30 - 40 / 7.9 - 10.6	250 / 3,600				

Requ	direments of carrier machine for RC RHS-L	
	Ouick coupler	Rotation drive
	Ouick Couplei	notation unive

Hydraulic system: one single acting hydraulic circuit up to RC04 one double acting hydraulic circuit from RC06 one double acting hydraulic circuit

**Note:** excavator needs to be equipped with quick coupler control





With the compact RC rotary coupler you increase the freedom of movement in the entire working area of the excavator. Thanks to the robust and low construction (it is firmly bolted to the boom), the maximum breakaway and ripping forces are achieved.

In addition to the usual movement, each attachment can be endlessly rotated by 360°. This enables more flexible and faster work without moving the excavator.

The newly gained freedom of movement allows work to be carried out more precisely, which saves additional manual work steps.

Here in combination with the proven S-Lock quick coupling system.

- Compact and low design.
- More flexibility due to 360° rotation.
- ▶ Low height thus high breakaway force.
- > Low maintenance.
- ▶ Lower quick coupler with mechanic or hydraulic locking available.



Mechanic Rotary Couplers RC KMS-S							
Туре	Width A (mm/in)	Width B (mm/in)	Height C (mm/in)	Weight* (from kg/lbs)	Rotations/min (@I/min / GPM)	<b>Torque**</b> (kNm/ft.lb)	Operating weight (t/lbs)
RC02 KMS30S-150	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@4 / 1.1	0.6 / 443	0.9 - 2.6 / 1,980 - 5,720
RC02 KMS30S-180	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@4 / 1.1	0.6 / 443	0.9 - 2.6 / 1,980 - 5,720
RC04 KMS40S	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@16 / 4.2	2 / 1,475	2.5 - 3.8 / 5,500 - 8,360
RC06 KMS40S	200 / 7.9	150 / 5.9	110 / 4.3	78 / 171	8.5@26 / 6.9	4.5 / 3,319	3.8 - 6 / 8,360 - 13,200
RC10 KMS45S	228 / 8.9	175 / 6.9	145 / 5.7	98 / 215	8.5@40 / 10.6	7.5 / 5,531	6 - 10 / 13,200 - 22,000
RC10 KMS50S	228 / 8.9	175 / 6.9	145 / 5.7	98 / 215	8.5@40 / 10.6	7.5 / 5,531	6 - 10 / 13,200 - 22,000
*w/o quick coupler and	upper bracke	t; **@360° c	onstant		_		

Package consists of: upper bracket, rotation drive, mechanic quick coupler, socket

Hydraulic Rotary Couplers RC KHS-S							
Туре	Width A (mm/in)	Width B (mm/in)	Height C (mm/in)	Weight* (from kg/lbs)	Rotations/min (@I/min / GPM)	<b>Torque**</b> (kNm/ft.lb)	Operating weight (t/lbs)
RC02 KHS30S-150	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@4 / 1.1	0.6 / 443	0.9 - 2.6 / 1,980 - 5,720
RC02 KHS30S-180	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@4 / 1.1	0.6 / 443	0.9 - 2.6 / 1,980 - 5,720
RC04 KHS40S	150 / 5.9	120 / 4.7	84 / 3.3	30 / 66	8.5@16 / 4.2	2 / 1,475	2.5 - 3.8 / 5,500 - 8,360
RC06 KHS40S	200 / 7.9	150 / 5.9	110 / 4.3	78 / 171	8.5@26 / 6.9	4.5 / 3,319	3.8 - 6 / 8,360 - 13,200
RC10 KHS45S	228 / 8.9	175 / 6.9	145 / 5.7	98 / 215	8.5@40 / 10.6	7.5 / 5,531	6 - 10 / 13,200 - 22,000
RC10 KHS50S	228 / 8.9	175 / 6.9	145 / 5.7	98 / 215	8.5@40 / 10.6	7.5 / 5,531	6 - 10 / 13,200 - 22,000
*w/o quick coupler and	l upper bracke	et; **@360° c	onstant				

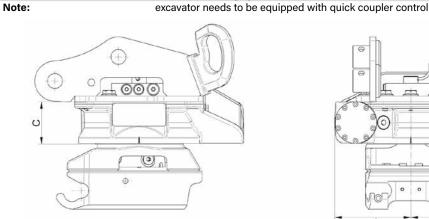
Package consists of: upper bracket, rotation drive, hydraulic quick coupler

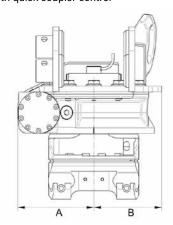
Technical data and hydraulics RC						
Туре	Breakout force max. (ISO) (kN/kNm / lbf/ft.lb)	Bucket width max. (mm/in)	Recommended oil flow rotate (I/min / GPM)	Hydraulic pressure rotate max. (bar/psi)		
RC02	28/20 / 6,160/14,750	800 / 31.5	3 - 4 / 0.8 - 1.1	175 / 2,520		
RC04	32/23 / 7,040/16,963	1,100 / 43.3	6 - 16 / 1.6 - 4.2	175 / 2,520		
RC06	43/35 / 9,460/25,813	1,200 / 47.2	18 - 26 / 4.8 - 6.9	250 / 3,600		
RC10	75/79 / 16.500/58.263	1.600 / 63	30 - 40 / 7.9 - 10.6	250 / 3.600		

#### Requirements of carrier machine for RC KHS-S

**Quick coupler** 

one single acting hydraulic circuit up to RC04 one double acting hydraulic circuit from RC06 Hydraulic system: one double acting hydraulic circuit





#### **Accessories for Quick Couplers, Tilt Couplers and Rotary Couplers**









## Installations sets for hydraulic quick couplers and tilt couplers

Туре	Description
KHS01L-KHS03L installation set safety	incl. KHS Control unit
KHS01L-KHS03L installation set basic	incl. unlockable flip switch (hold to run)

KHS03L HD-KHS08L installation set safety incl. KHS Control unit

KHS03L HD-KHS08L installation set basic incl. unlockable flip switch (hold to run)

#### Non-return valve sets for hydraulic tilt couplers TC



Туре	Description
TC02-TC03-180 NRV	non-return valve set for TC02 and TC03
TC045-180 NRV	non-return valve set for TC045
TC07-180 NRV	non-return valve set for TC07
TC10-180 NRV	non-return valve set for TC10
TC14-140 NRV	non-return valve set for TC14

#### Load hook for quick couplers and tilt couplers

•	•
Туре	Description
KM 685 06 KSW01 hook	load hook for system L-Lock (1t / 2,200lbs load capacity)
KM 685 06 KSW03 hook 2t	load hook for system L-Lock (2t / 4,400lbs load capacity)
KM 685 06 KSW03 hook 3t	load hook for system L-Lock (3t / 6,600lbs load capacity)
KM 685 06 KSW08 hook	load hook for system L-Lock (5t / 11,000lbs load capacity)

# KMS01L socket & KMS03L socket

#### Sockets for mechanic quick couplers and tilt couplers

Туре	Description
KMS01L socket	socket for mechanical System L-Lock (KMS01)
KMS03L socket	socket for mechanical System L-Lock (KMS03)
KMS08L socket	socket for mechanical System L-Lock (KMS08) and S-Lock
	· · · · · · · · · · · · · · · · · · ·

KMS08L socket

#### **Quick coupling adapters for System L-Lock**



Туре	Description
KSW01 rigid	bolt-on adapter
KSW01 cardanic	adapter for cardanic suspension incl. suspension, w/o pendulum damper
KSW03 rigid	bolt-on adapter
KSW03 cardanic	adapter for cardanic suspension incl. suspension, w/o pendulum damper
KSW08 rigid	bolt-on adapter
KSW08 cardanic	adapter for cardanic suspension incl. suspension, w/o pendulum damper

#### **NOX TILTROTATORS**

With our Tiltrotator, your attachments can be rotated by 360° continuously and tilted by up to 50° to both sides. Therefore, the efficiency of your machine will be increased dramatically as time and resources will be saved.

**FOUR FACTS ABOUT THE USE OF TILTROTATORS:** 

#### PRODUCTIVITY AND PROFITABILITY

MANAGE THE SAME AMOUNT OF WORK IN LESS TIME.

#### SAFFTY

THE NOX TILTROTATOR COMPLIES WITH ALL CURRENT SAFETY REGULATIONS AND HELPS THE OPERATOR AND SURROUNDING WORKFORCE TO ACHIEVE AN ACCIDENT-FREE ENVIRONMENT.

#### **VERSATILTY AND FLEXIBILITY**

INCREASE THE USE OF YOUR MACHINE DRAMATICALLY AND ACCEPT MORE JOBS. ESPECIALLY IN COMBINATION WITH THE NOX.

#### **READY FOR THE FUTURE**

THE NOX TILTROTATOR COMES GPS-READY WITH ITS VERY MODERN NOXProp+ CONTROL SYSTEM. THE MOST COMMON 3D MACHINE CONTROL SYSTEMS CAN BE IMPLEMENTED. EVEN RETROACTIVELY.



**Catalog: NOX Tiltrotators** 

Experience and innovation have led to one of the most advanced tools for excavators – the **NOX** Tiltrotator:  $360^{\circ}$  endless rotation and a tilt angle of up to  $2 \times 50^{\circ}$  make it a universal joint, that allows for many new application possibilities. In combination with a quick coupler and different attachments this means highest efficiency on each site.

#### Advantages:

- ▶ Precision and safety due to "smooth" proportional control.
- ▶ High stability and long service life thanks to special cast housing.
- ▶ **Low overall height** thanks to elliptic rotary actuator.
- ▶ **High and constant tilting force** due to cylinderless rotary actuator.
- ▶ No protruding parts: excavation with narrow bucket possible in small, deep canals, even under or in between existing tubes.
- ▶ **Low maintenance**: worm drive lubricated permanently (oil bath).



TR07NOX







	TR045NOX	TR07NOX	TR11NOX
Operating weight (t/lbs)	2.5 - 4.5 / 5,500 - 9,900	4 - 7 / 8,800 - 15,400	6 - 11 / 13,200 - 24,200
Weight* (from) (kg/lbs)	150 / 330	200 / 440	320 / 704
Width A* (from) (mm/in)	190 / 7.5	205 / 8.1	215 / 8.5
Length B* (from) (mm/in)	435 / 17.1	460 / 18.1	580 / 22.8
Height C* (from) (mm/in)	380 / 15.0	420 / 16.5	475 / 18.7
Recommended bucket width max. (mm/in)	1,100 / 43.3	1,100 / 43.3	1,300 / 51.2
Breakout force max. (ISO) (kN/lbf)	40 / 8,992	50 / 11,240	75 / 16,860
Breakout torque max. (kNm/ft.lb)	29 / 21,387	40 / 29,500	79 / 58,263
Tilt angle	2 x 45°	2 x 50°	2 x 50°
Tilt torque (constant) (kNm/ft.lb)	6.5 / 4,793	11 / 8,112	16 / 11,800
Rotation speed (1/min)	8.5	8.5	8.5
Rotation torque (Nm/ft.lb)	3,800 / 2,803	4,700 / 3,466	7,500 / 5,531
Hydraulic pressure max. (MPa/psi)	25 / 3,600	25 / 3,600	27 / 3,888
Recommended pump capacity CSP (I/min / GPM)	30-80 / 7.9-21.1	30-80 / 7.9-21.1	40-100 / 10.6-26.4
Recommended pump capacity DF04/06/10 (I/min / GPM)	15/32 / 4.0/8.5	15/32 / 4.0/8.5	21/40 / 5.5/10.6
Electric swivel	<u>-</u>	optional	optional

<sup>\*</sup> Specifications depend on the machine configuration (upper bracket and lower quick coupler)

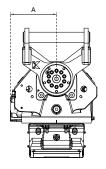
Note: Highflow swivel (DF10 HF) and Powerline (CSP PL) available

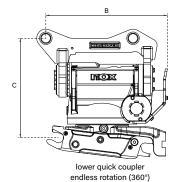
Standard package: tiltrotator, electrical control system, upper bracket, lower quick coupler

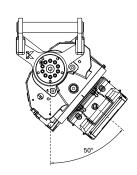
Accessories						
Hydraulic Gripper	Weight	Dimensions D x E x F**	Opening max. G	Closing time***	Closing force	Load capacity
• •	(approx. kg/lbs)	(mm/in)	(mm/in)	(sec)	(kN/lbf)	(kg/lbs)
TRG07	40 / 88	470 x 520 x 150 / 18.5 x 20.4 x 5.9	424 / 16.7	1.5	7.5 / 1,650	300 / 660
TRG11	80 / 176	600 x 660 x 210 / 23.6 x 25.9 x 8.2	644 / 25.3	1.5	10 / 2,200	500 / 1,100
** see technical drawing	*** at 25 I/min / 6.5 GPM					

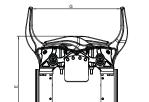
Technical drawing

#### **Tiltrotator TR11NOX S45**









**Gripper TRG11** 



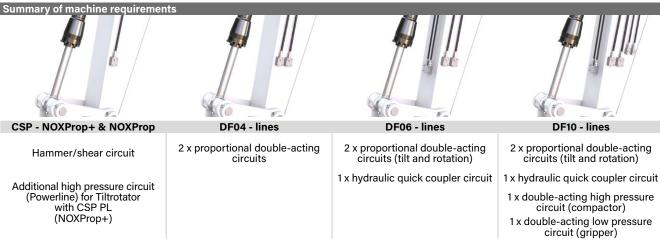


The NOXProp+ control system provides more safety and precision. NOX Tiltrotator, quick coupler and attached tools are controlled effectively and conveniently with ergonomic joysticks by the smart NOXProp+. Easily retrofittable for each excavator. Features are the individual function setting and the easy menu navigation thanks to the corresponding touchscreen. Integrated GPS, LTE, Bluetooth and WiFi link your machine with the digital workplace. In combination with our SmartTag, the connection with the fleet management is realized for maximum integration and effectivity.

#### **Key features NOXProp+:**

- > Optimal NOX performance thanks to perfectly adjusted control
- ▶ Autocalibration and Position indicator at the display.
- ▶ 4 different user profiles with up to 10 tool profiles (more flexibility)
- ▶ Integration with 2D/3D excavation system NOXGeo
- ▶ Easy installation, Connectivity (WiFi, LTE, GPS, Bluetooth) and remote maintenance.





	NOXProp+	DF04	DF06	DF10
NOXGeo (GPS-ready)	<u> </u>	•		
Autocalibration	<b>⊘</b>	$\bigcirc$	$\overline{\bigcirc}$	$\overline{\bigcirc}$
Angle position indication	<b>⊘</b>	$\bigcirc$	$\overline{\bigcirc}$	$\overline{\bigcirc}$
Individual operator settings	<b>⊘</b>			$\overline{\bigcirc}$
Individual speed setting	<b>⊘</b>	$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\overline{\bigcirc}$
Touchscreen in cabin	$\bigcirc$	$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\overline{\bigcirc}$
Trouble shooting on display	<b>⊘</b>	$\overline{\bigcirc}$	$\overline{}$	$\overline{\bigcirc}$
Remote maintenance	<b>⊘</b>	$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\overline{\bigcirc}$
Connectivity tools (Bluetooth, LTE, WiFi)	<b>⊘</b>	$\overline{\bigcirc}$		$\overline{\bigcirc}$
Fully proportional control	<b>⊘</b>	depending on machine	depending on machine	depending on machine
Changing roller position	<b>⊘</b>	$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\overline{\ominus}$
Individual tool settings	<b>⊘</b>	$\overline{\bigcirc}$		$\overline{\bigcirc}$
Tilt, rotation & extra in same movement	<b>⊘</b>	$\overline{\bigcirc}$	$\overline{\bigcirc}$	depending on machine
High flow attachment (HF)	•	$\overline{\bigcirc}$	$\overline{\bigcirc}$	•
Quick coupler safety sensors		$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\bigcirc$
Quick coupler control	<b>⊘</b>	$\overline{\bigcirc}$	$\overline{\bigcirc}$	$\overline{\bigcirc}$
Driving/steering function	•	$\overline{\bigcirc}$		$\overline{\bigcirc}$
Fleet management	•	•	•	•
Machine assistance systems		$\bigcirc$	$\bigcirc$	$\bigcirc$





Optional

#### Multi Purpose Grabs for **nox** Tiltrotators 3-12t / 6,600-26,400lbs **A-Series**

Especially adapted to the **DOX** Tiltrotators there are different attachments available. The Multi Purpose Grabs with hydraulic cylinder or low maintenance HPXdrive are ideally adjusted to the **NOX** Tiltrotators.

- ▶ #PXarive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required.
- ▶ #PXdrive 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- > The sophisticated ergonomics and the new improved shell design enables loading, sorting, digging and demolition operations with maximum efficiency.
- ▶ *HPXdrive* different applications possible through easy exchange system.
- Different adapters available.
- > **HPXdrive**-grabs: warranty extension without surcharge possible: kinshofer.com/service



Multi Purpose Grabs with #PXdrive or hydraulic cylinder								
Туре	for NOX	Width E	Opening A	Volume	Weight	Load capacity	Closing force* (kN @bar/	Operating weight
		(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	lbf @psi)	(t/lbs)
A05TR-40 HPX	TR045NOX	386 / 15.1	1,043 / 41	70 / 0.09	225 / 495	1,500 / 3,300	18 @190 / 3,960 @2,736	3 - 6 / 6,600 - 13,200
A07TR-45 HPX	TR07NOX	450 / 17.7	1,344 / 52.9	145 / 0.19	305 / 671	2,000 / 4,400	18 @260 / 3,960 @3,744	5 - 8 / 11,000 - 17,600
A11TR-50 HPX	TR11NOX	500 / 19.6	1,545 / 60.8	210 / 0.27	365 / 803	2,500 / 5,500	15,3 @260 / 3,366 @3,744	7 - 12 / 15,400 - 26,400
A05TR-40	TR045NOX	386 / 15.1	1,233 / 48.5	70 / 0.09	165 / 363	1,500 / 3,300	21 @250 / 4,620 @3,600	3 - 6 / 6,600 - 13,200
A07TR-45	TR07NOX	450 / 17.7	1,340 / 52.7	100 / 0.13	225 / 495	2,000 / 4,400	21 @250 / 4,620 @3,600	5 - 8 / 11,000 - 17,600
A11TR-50	TR11NOX	500 / 19.6	1,650 / 64.9	175 / 0.22	310 / 682	2,500 / 5,500	25 @260 / 5,500 @3,744	7 - 12 / 15,400 - 26,400

Package consists of: multi purpose grab, (hydraulic block incl. hosing for HPX-grabs)

Note: adapters of different manufacturers available

Accessories	
Туре	Description
KM 685 09E-A02-A9	bolt-on side walls for A02 to A09
KM 685 05-D04-A04	4-grip for A05TR (load capacity: 600kg/1,320lbs)
KM 685 05-D06/09-A06-09	4-grip for A07TR (load capacity: 600kg/1,320lbs) and A11TR (load capacity: 900kg/1,980lbs)

#### Requirements of carrier machine

Operating pressure at pump capacity (open/close):

A05TR-HPX: 19 MPa at max. 75 l/min / 2,740 psi at max. 20 GPM A07/A11TR-HPX: 26 MPa at max. 75 l/min / 3,745 psi at max. 20 GPM

A05TR-HPX: 19 - 32 MPa at max. 40 I/min

A07/A11TR-HPX: 26 - 32 MPa at max. 40 I/min 3,745 - 4,640 psi at max. 10.6 GPM 2,740 - 4,640 psi at max. 10.6 GPM

A05/A07TR: 25 MPa at 25 - 75 l/min / 3,600 psi at 6.6 - 20 GPM A11TR: 32 MPa at 25 - 75 I/min / 4,640 psi at 6.6 - 20 GPM

#### Technical drawing













#### Demolition & Sorting Grabs for **NOX** 3-12t / 6,600-26,400lbs

**D-Series** 

Especially adapted to the **nox** Tiltrotators there are different attachments available. The Demolition and Sorting Grabs with hydraulic cylinder or low maintenance *HPXdrive* are ideally adjusted to the **nox** Tiltrotators.

- HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required.
- ► HPXdrive 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- ▶ Shells with perforated shells and exchangeable cutting edges.
- > **HPXdrive** different applications possible through **easy exchange system**.
- > Different adapters available.
- HPXdrive-grabs: warranty extension without surcharge possible: kinshofer.com/service



<b>Demolition and Sor</b>	ting Grabs with	<i>HPXdrive</i> or h	ydraulic cylind	ler				
Туре	for NOX	Width E	Opening A	Volume	Weight	Load capacity	Closing force*	Operating weight
		(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	(kN @ bar/ lbf @ psi)	(t/lbs)
D05TR-40 HPX	TR045NOX	420 / 16.5	1,045 / 41.1	75 / 0.09	240 / 528	1,500 / 3,300	18 @ 250	3 - 6 / 6,600 - 13,200
D07TR-45 HPX	TR07NOX	470 / 18.5	1,350 / 53.1	150 / 0.19	310 / 682	2,000 / 4,400	18 @ 260	5 - 8 / 11,000 - 17,600
D11TR-50 HPX	TR11NOX	520 / 20.4	1,545 / 60.8	220 / 0.28	360 / 792	2,500 / 5,500	15.3 @ 260	7 - 12 / 15,400 - 26,400
D05TR-40	TR045NOX	420 / 16.5	1,212 / 47.7	60 / 0.07	165 / 363	1,500 / 3,300	21.5 @ 250	3 - 6 / 6,600 - 13,200
D07TR-45	TR07NOX	470 / 18.5	1,345 / 52.9	90 / 0.11	190 / 418	2,000 / 4,400	21 @ 250	5 - 8 / 11,000 - 17,600
D11TR-50	TR11NOX	520 / 20.4	1,665 / 65.5	165 / 0.21	305 / 671	2,500 / 5,500	24 @ 260	7 - 12 / 15,400 - 26,400

Package consists of: demolition and sorting grab, (hydraulic block incl. hosing for HPX-grabs)

Note: adapters of different manufacturers available

Accessorie	36
10000330110	7

Туре	Description
Type	Description

**KM 685 05-D04-A04** 4-grip for D05TR (load capacity: 600kg/1,320lbs)

KM 685 05-D06/09-A06-09 4-grip for D07TR (load capacity: 600kg/1,320lbs) and D11TR (load capacity: 900kg/1,980lbs)

#### Requirements of carrier machine

#### Operating pressure at pump capacity (open/close):

D05TR-HPX: 19 MPa at max. 75 l/min / 2,740 psi at max. 20 GPM D07/D11TR-HPX: 26 MPa at

D05TR-HPX: 19 - 32 MPa at max. 40 l/min / 2,740 - 4,640 psi at max. 10.6 GPM

2,740 - 4,640 psi at max. 10.6 GPM D05/D07TR: 25 MPa at 25 - 75 l/min / 3,600 psi at 6.6 - 20 GPM D07/D11TR-HPX: 26 MPa at max. 75 l/min / 3,745 psi at max. 20 GPM

D07/D11TR-HPX: 26 - 32 MPa at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM

D11TR: 32 MPa at 25 - 75 l/min / 4,640 psi at 6.6 - 20 GPM

#### **Technical drawings**













#### 4-Grip for D- and A-Grab Series up to 9t / 19,800lbs

KM 685 05-D-A

The device is simply attached to the bottom of the shells and you can grip concrete parts, curbs, etc. precisely, safely and without damage. The 4-Grip is simply plugged onto the grab shells and secured with a folding pin. The gripper teeth must not be removed, which significantly reduces assembly

Thanks to its special kinematics you can grab items not only when closing the shells but also when opening. Shaft rings can be loaded and unloaded fast and easy without damaging them!

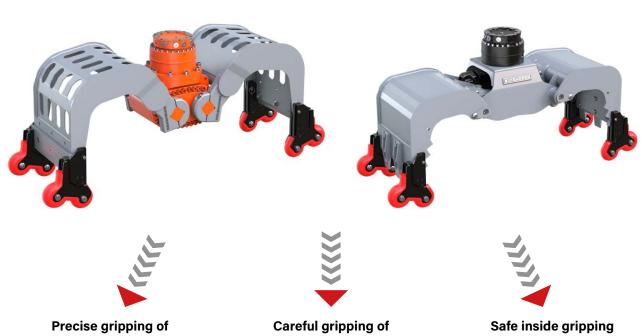
- ▶ **Economic solution**, as it is only an accessory that increases the flexibility of your attachment.
- ▶ Robust design.
- ▶ Plastic compression rolls avoid damage of the material to be gripped.
- > Fast and easy mounting and removal on site.
- ▶ Low additional weight: only 28kg/61.6lbs in total.
- ▶ High load capacities:

for A02HPX/D02HPX: 350 kg / 770 lbs

for A04H/A04HPX and D04H/D04HPX: 600 kg / 1,320 lbs for A06H/A06HPX and D06H/D06HPX: 600 kg / 1,320 lbs

for A09H/A09HPX and D09H/D09HPX: 900 kg / 1,980 lbs





very narrow objects



plain, slippery surfaces



without retooling



#### Clamshell Buckets for **nox** 3-11t / 6,600-24,200lbs

**C-Series** 

Especially adapted to the **NOX** Tiltrotators there are different attachments available.

The Clamshell Buckets in different widths with the low maintenance *HPXdrive* are ideally adjusted to the **TOX** Tiltrotators.

- HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required.
- > **HPXdrive** 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- HPXdrive constant and high closing force during the complete opening and closing process.
- ▶ *HPXdrive* different applications possible through **easy exchange system**.
- > Different adapters available.
- HPXdrive-grabs: warranty extension without surcharge possible: kinshofer.com/service



Clamshell Bucket	Clamshell Bucket with #PXdrive									
Туре	for NOX	Width	Opening	Volume	Weight	Load capacity	Closing force (kN @bar/	Operating weight		
		(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	lbf @psi)	(t/lbs)		
C07TR-40 HPX	TR07NOX	400 / 15.7	1,110 / 43.3	115 / 0.15	295 / 649	3,000 / 6,600	22 @260 / 4,945 @3,744	3 - 7 / 6,600 - 15,400		
C07TR-50 HPX	TR07NOX	500 / 19.7	1,110 / 43.3	140 / 0.18	310 / 682	3,000 / 6,600	22 @260 / 4,945 @3,744	3 - 7 / 6,600 - 15,400		
C07TR-60 HPX	TR07NOX	600 / 23.6	1,110 / 43.3	170 / 0.22	325 / 715	3,000 / 6,600	22 @260 / 4,945 @3,744	3 - 7 / 6,600 - 15,400		
C11TR-40 HPX	TR11NOX	400 / 15.7	1,250 / 49.2	145 / 0.19	265 / 583	3,000 / 6,600	22 @260 / 4,945 @3,744	5 - 11 / 11,000 - 24,200		
C11TR-50 HPX	TR11NOX	500 / 19.7	1,250 / 49.2	180 / 0.24	295 / 649	3,000 / 6,600	22 @260 / 4,945 @3,744	5 - 11 / 11,000 - 24,200		
C11TR-60 HPX	TR11NOX	600 / 23.6	1,250 / 49.2	220 / 0.29	315 / 693	3,000 / 6,600	22 @260 / 4,945 @3,744	5 - 11 / 11,000 - 24,200		

Package consists of: clamshell bucket, hydraulic block incl. hosing

Note: adapters of different manufacturers available

#### Requirements of carrier machine

#### Operating pressure at pump capacity (open/close):

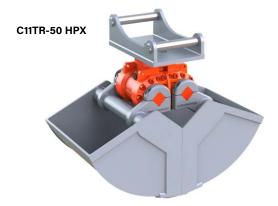
C07TR-HPX: 26 MPa bei max. 75 I/min / 3,745 psi at max. 20 GPM C11TR-HPX: 26 MPa bei max. 75 I/min / 3,745 psi at max. 20 GPM

C07TR-HPX: 26 - 32 MPa bei max. 40 l/min / C11TR-HPX: 26 - 32 MPa bei max. 40 l/min /

3,745 - 4,640 psi at max. 10.6 GPM 3,745 - 4,640 psi at max. 10.6 GPM

#### Technical drawings





#### Fork Tines for **nox**-Tiltrotators 3-12t / 6,600-26,400lbs

**GAF/GAH** 

Lifting, moving and positioning of palletized or unpalletized materials is easy with the GAF Fork Set. Turn your excavator into a fork lift truck - ideal in combination with a Tiltrotator. Now also available with hydraulically adjustable tines for an even easier and more effective and secure working.

- **▶** High load capacity.
- Low self-weight.
- ▶ Very economic: low cost.
- ▶ Ideal for use with Tiltrotator: highest flexibility.
- Two versions available: with mechanically or hydraulically adjustable tines.
- ▶ Easy mounting thanks to a quick change adapter.
- > Different adapters available.
- ▶ Mechanical fork tines with adapter system L-Lock, Oilquick or Verachtert without surcharge.



Mechanic Fork Tines GAF										
Туре	for NOX	Standard connection	Load capacity max.	Width	Weight	Tine length	Operating weight			
			(kg/lbs)	(mm/in)	(kg/lbs)	(mm/in)	(t/lbs)			
GAF6	TR045NOX / TR07NOX	S40	1,900 / 4,180	1,000 / 39.3	140 / 308	1,000 / 39.3	3 - 6 / 6,600 - 13,200			
GAF8	TR07NOX / TR11NOX	S45	1,900 / 4,180	1,200 / 47.2	190 / 418	1,000 / 39.3	6 - 8 / 13,200 - 17,600			
GAF12	TR11NOX	S45	2,500 / 5,500	1,200 / 47.2	200 / 440	1,200 / 47.2	9 - 12 / 19,800 - 26,400			

Package consists of: fork tines, frame with standard suspension for S-couplers\*

Hydraulic Fork T	Hydraulic Fork Tines GAH									
Туре	for NOX	Standard connection	Load capacity max. (kg/lbs)	Width (mm/in)	Weight (kg/lbs)	Tine length (mm/in)	Operating weight (t/lbs)			
GAH6	TR045NOX / TR07NOX	S40	1,900 / 4,180	1,000 / 39.3	160 / 352	1,000 / 39.3	3 - 6 / 6,600 - 13,200			
GAH8	TR07NOX / TR11NOX	S45	1,900 / 4,180	1,200 / 47.2	210 / 462	1,000 / 39.3	6 - 8 / 13,200 - 17,600			
GAH12	TR11NOX	S45	2,500 / 5,500	1,200 / 47.2	220 / 484	1,200 / 47.2	9 - 12 / 19,800 - 26,400			

Package consists of: hydraulic fork tines, frame with standard suspension for S-couplers\*

Note: put loads always the nearest to the back and to the centre of gravity

#### Requirements for carrier machine



The excavator must be conform to lifting regulations





<sup>\*</sup>other adapters available on request

#### Levelling Bar for **nox** Tiltrotators up to 8t / 17,600lbs

The AVB Levelling Bar with roller for NOX Tiltrotators is the ideal tool to level material for a smooth surface for excavators with up to 8t/17,600lbs operating weight.

- ▶ **Robust design:** no protruding parts, stable construction.
- ▶ Effective distribution and levelling of gravel etc.
- > Different adapters available.
- ▶ Different widths available.



Levelling Bar with roller AVB									
Туре	for NOX	Width (mm/in)	Weight (kg/lbs)	Operating weight (t/lbs)	Roll diameter (Ø/mm/in)				
AVB 8-1800	TR07NOX / TR11NOX	1,800 / 70.8	230 / 506	< 8 / 17,600	273 / 9.57				
AVB 8-2100	TR07NOX / TR11NOX	2,100 / 82.6	250/ 550	< 8 / 17,600	324 / 12.76				

Package consists of: levelling bar with roller

Note: adapters of other manufacturers on request

Accessories	
Туре	Description
KSW03-AVB	adapter for system L-Lock KMS03L/KHS03L – up to 6.5t / 14,300lbs
KSW08-AVB	adapter for system L-Lock KMS08L/KHS08L - up to 12t / 26,400lbs
OQ40-AVB	adapter for system Oilquick OQ40 – up to 5t / 11,000lbs
OQ45-5-AVB	adapter for system Oilquick OQ45-5 - up to 12t / 26,400lbs
S40-AVB	adapter for system S-Lock KMS40S/KHS40S – up to 6t / 13,200lbs
S45-AVB	adapter for system S-Lock KMS45S/KHS45S – up to 11t / 24,200lbs
S50-AVB	adapter for system S-Lock KMS50S/KHS50S - up to 11t / 24,200lbs





**KRC** 

#### Compactor Wheel 1.5t - 14t / 3,300 - 33,800 lbs

Designed for compacting the ground and fillings of trenches, this attachment provides a solid, uniform surface that lasts over time. Fitted with tapered roller bearings, wheel compactors are designed to ensure uniform operation, favouring a high degree of compacting. Available in 3 variants from a minimum of 1.5 t / 3,300 lbs up to a maximum of 14 t / 33,800 lbs.

- > Smooth operation and high degree of compression thanks to the tapered roller bearings installed in the compactor wheel.
- ▶ High-strength steel and robust bearings ensure trouble-free operation.
- ▶ Long lifetime

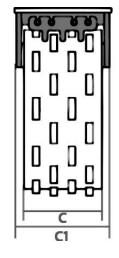


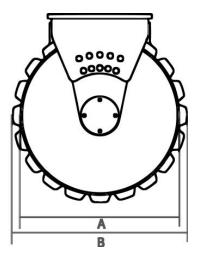
<b>Compactor W</b>	heel					
Туре	Operating weight	Width A*	Width B*	Width C*	Width C1*	Weight
	(t/lbs)	(mm/in)	(mm/in)	(mm/in)	(mm/in)	(kg/lbs)
KRC1-200	1.5 - 4 / 3,300 - 8,800	400 / 15.75	500 / 19.69	200 /7.87	290 / 11.42	280 / 616
KRC1-400	1.5 - 4 / 3,300 - 8,800	400 / 15.75	500 / 19.69	400 / 15.75	490 / 19.29	300 / 660
KRC1-500	1.5 - 4 / 3,300 - 8,800	400 / 15.75	500 / 19.69	500 / 19.69	590 / 23.23	320 / 704
KRC2-300	4 - 8 / 8,800 - 17,600	500 / 19.69	600 / 23.62	300 / 11.81	390 / 15.35	310 / 682
KRC2-400	4 - 8 / 8,800 - 17,600	500 / 19.69	600 / 23.62	400 / 15.75	490 / 19.29	320 / 704
KRC2-500	4 - 8 / 8,800 - 17,600	500 / 19.69	600 / 23.62	500 / 19.69	590 / 23.23	330 / 726
KRC2-600	4 - 8 / 8,800 - 17,600	500 / 19.69	600 / 23.62	600 / 23.62	690 / 27.17	340 / 748
KRC2-800	4 - 8 / 8,800 - 17,600	500 / 19.69	600 / 23.62	800 / 31.50	890 / 35.04	360 / 792
KRC3-300	8 - 14 / 17,600 - 30,800	600 / 23.62	700 / 27.56	300 / 11.81	390 / 15.35	310 / 682
KRC3-400	8 - 14 / 17,600 - 30,800	600 / 23.62	700 / 27.56	400 / 15.75	490 / 19.29	320 / 704
KRC3-500	8 - 14 / 17,600 - 30,800	600 / 23.62	700 / 27.56	500 / 19.69	590 / 23.23	330 / 726
KRC3-600	8 - 14 / 17,600 - 30,800	600 / 23.62	700 / 27.56	600 / 23.62	690 / 27.17	340 / 748
KRC3-800	8 - 14 / 17,600 - 30,800	600 / 23.62	700 / 27.56	800 / 31.50	890 / 35.04	360 / 792
KRC3-1000	8 - 14 / 17,600 - 30,800	600 / 23.62	700 / 27.56	1,000 / 39.37	1,090 / 42.91	700 / 1,540

Package consists of: compactor wheel

\*see technical drawing

#### Technical drawing





**SKP** 

### **Grading Bucket System S-Lock 0.8-12t / 6,600-26,400lbs**

The SKP grading buckets are ideal for all types of grading and leveling work and are very robust with a low weight thanks to the use of HB 400 steel.

These properties make the bucket an efficient and profitable tool. Depending on the type, the bucket is suitable for excavators with an operating weight of up to 12t / 26,400lbs.

- ▶ Robust: low wear.
- ▶ Easy mounting to the carrier.
- > Different adapters available.
- **▷** No protruding parts.



<b>Grading Buckets SKP</b>				
Туре	<b>Volume</b> (liter/c.y.)	<b>Width</b> (mm/in)	<b>Weight</b> (approx. kg/lbs)	Operating weight (t/lbs)
SKP 1 - 70	70 / 0.09	800 / 31.5	50 / 110	0.8 - 1.5 / 1,760 - 3,300
SKP 2 - 90	90 / 0.12	1,000 / 39.4	60 / 132	1 - 1.5 / 2,200 - 3,300
SKP 2 - 110	110 / 0.14	1,000 / 39.4	75 / 165	1 - 1.5 / 2,200 - 3,300
SKP 4 - 130	130 / 0.17	1,100 / 43.3	90 / 198	1.5 - 2.5 / 3,300 - 5,500
SKP 4 - 160	160 / 0.21	1,100 / 43.3	110 / 242	2 - 3 / 4,400 - 6,600
SKP 4 - 200	200 / 0.26	1,100 / 43.3	120 / 264	2 - 3 / 4,400 - 6,600
SKP 6 - 240	240 / 0.31	1,200 / 47.2	130 / 286	3 - 4 / 6,600 - 8,800
SKP 6 - 300	300 / 0.39	1,300 / 51.2	160 / 352	3 - 5.5 / 6,600 - 12,100
SKP 8 - 400	400 / 0.52	1,400 / 55.1	180 / 396	5.5 - 8 / 12,100 - 17,600
SKP 10 - 450	450 / 0.59	1,500 / 59.1	240 / 528	8 - 10 / 17,600 - 22,000
SKP 10 - 500	500 / 0.65	1,500 / 59.1	280 / 616	8 - 10 / 17,600 - 22,000
SKP 12 - 550	550 / 0.72	1,500 / 59.1	310 / 682	10 - 12 / 22,000 - 26,400

Package consists of: bucket, standard adapter for S-coupler (other adapters on request)





**SKK** 

#### Cable Bucket System S-Lock 0.8-12t / 6,600-26,400lbs

The SKK cable buckets are used for digging out cable ducts and are very robust with a low weight thanks to the use of HB 400 steel. These properties make the bucket an efficient and profitable tool.

Depending on the type, the bucket is suitable for excavators with an operating weight of up to 12t / 26,400 lbs.

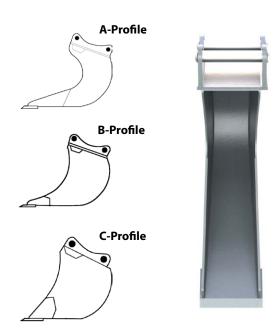
- ▷ Different forms available: conical or straight shape.
- ▶ **Robust:** also suitable for hard grounds.
- ▶ Easy mounting to the carrier.
- > Different profiles available.
- > Different adapters available.
- ▶ No protruding parts.



Cable Buckets SKK					
Туре	<b>Volume</b> (liter/c.y.)	Width (mm/in)	<b>Weight</b> (approx. kg/lbs)	Profile	Operating weight (t)
SKK 1 - 25	25 / 0.03	200 / 7.9	15 / 33	С	0.8 - 1 / 1,760 - 2,200
SKK 2 - 30	30 / 0.04	220 / 8.7	35 / 77	С	1.5 - 2 / 3,300 - 4,400
SKK 2 - 35	35 / 0.05	220 / 8.7	40 / 88	Α	1.5 - 2 / 3,300 - 4,400
SKK 4 - 35	35 / 0.05	220 / 8.7	40 / 88	Α	2.8 - 4 / 6,160 - 8,800
SKK 4 - 60	60 / 0.08	300 / 11.8	50 / 110	Α	2.8 - 4 / 6,160 - 8,800
SKK 4 - 90	90 / 0.12	400 / 15.7	60 / 132	Α	2.8 - 4 / 6,160 - 8,800
SKK 6 - 130	130 / 0.17	200 / 7.9	70 / 154	Α	5 - 6 / 11,000 - 13,200
SKK 6 - 160	160 / 0.21	300 / 11.8	75 / 165	Α	5 - 6 / 11,000 - 13,200
SKK 6 - 180	180 / 0.24	400 / 15.7	80 / 176	Α	5 - 6 / 11,000 - 13,200
SKK 10 - 130	130 / 0.17	200 / 7.9	70 / 154	Α	6.5 - 10 / 14,300 - 22,000
SKK 10 - 160	160 / 0.21	300 / 11.8	75 / 165	Α	6.5 - 10 / 14,300 - 22,000
SKK 10 - 180	180 / 0.24	400 / 15.7	80 / 176	Α	6.5 - 10 / 14,300 - 22,000
SKK 12 - 200	200 / 0.26	200 / 7.9	95 / 209	В	11 - 12 / 24,200 - 26,400
SKK 12 - 250	250 / 0.33	300 / 11.8	110 / 242	В	11 - 12 / 24,200 - 26,400
SKK 12 - 275	275 / 0.36	400 / 15.7	120 / 264	В	11 - 12 / 24,200 - 26,400
SKK 12 - 300	300 / 0.39	500 / 19.7	140 / 308	В	11 - 12 / 24,200 - 26,400
SKK 12 - 330	330 / 0.43	600 / 23.6	150 / 330	В	11 - 12 / 24,200 - 26,400

Package consists of: bucket, standard adapter for S-coupler (other adapters on request)





**GB-L** 

General Bucket for all kinds of excavation works in light and medium-heavy soils as well as for loading or backfilling of sand, gravel and earth. The integrated quick change adapter is adjusted to the system L-Lock and can be mounted both directions. Can be used as backhoe bucket or face shovel (except GB01L). Other adapters on request.

- > Double conical design.
- ▶ Long bucket base for easy penetration and high excavating capacity.
- ▶ Durable thanks to robust design and use of highly resistant wearout steel. Cutting edges 500HB, bucket base 400HB.
- Protruding bucket base for better grading behavior and protection from wearout.
- → GB01L GB03L: bolt-on teeth / GB04L GB12L: welded shell teeth.



**GB08L SYM** 

уре	Number	Volume	Width	Weight	Adapter	Operating
	of teeth	ISO 7451 (m³/yd³)	(mm/in)	(kg/lbs)		<b>weight</b> (t/lbs)
B01L-024	2	0.013 / 0.017	240 / 9.4	21 / 46.2	KSW01	0.5-1 / 1,100-2,200
B01L-024	3	0.015 / 0.017	300 / 11.8	24 / 52.8	KSW01	0.5-1 / 1,100-2,200
B01L-040	3	0.020 / 0.026	400 / 15.7	27 / 59.4	KSW01	0.5-1 / 1,100-2,200
B01L-050	4	0.024 / 0.031	500 / 19.6	30 / 66	KSW01	0.5-1 / 1,100-2,200
B02L-022 SYM	2	0.024 / 0.031	220 / 8.6	29 / 63.8	KSW01 SYM	1.0-1.8 / 2,200-3,960
B02L-025 SYM	3	0.026 / 0.034	250 / 9.8	31 / 68.2	KSW01 SYM	1.0-1.8 / 2,200-3,960
B02L-025 SYM	3	0.030 / 0.039	300 / 11.8	37 / 81.4	KSW01 SYM	
B02L-030 SYM	3					1.0-1.8 / 2,200-3,960
	4	0.040 / 0.052	400 / 15.7	41 / 90.2	KSW01 SYM	1.0-1.8 / 2,200-3,960
B02L-050 SYM		0.050 / 0.065	500 / 19.6	49 / 107.8	KSW01 SYM	1.0-1.8 / 2,200-3,960
B02L-060 SYM	4	0.060 / 0.078	600 / 23.6	53 / 116.6	KSW01 SYM	1.0-1.8 / 2,200-3,960
B03L-030 SYM	3	0.040 / 0.052	300 / 11.8	47 / 103.4	KSW03 SYM	1.8-2.6 / 3,960-5,720
B03L-040 SYM	3	0.060 / 0.078	400 / 15.7	56 / 123.2	KSW03 SYM	1.8-2.6 / 3,960-5,720
B03L-050 SYM	4	0.080 / 0.104	500 / 19.6	62 / 136.4	KSW03 SYM	1.8-2.6 / 3,960-5,720
B03L-060 SYM	4	0.097 / 0.126	600 / 23.6	72 / 158.4	KSW03 SYM	1.8-2.6 / 3,960-5,720
B04L-030 SYM	3	0.056 / 0.073	300 / 11.8	63 / 138.6	KSW03 SYM	2.6-3.5 / 5,720-7,700
B04L-040 SYM	3	0.075 / 0.098	400 / 15.7	71 / 156.2	KSW03 SYM	2.6-3.5 / 5,720-7,700
B04L-050 SYM	4	0.100 / 0,130	500 / 19.6	84 / 184.8	KSW03 SYM	2.6-3.5 / 5,720-7,700
B04L-060 SYM	4	0.127 / 0.166	600 / 23.6	93 / 204.6	KSW03 SYM	2.6-3.5 / 5,720-7,700
B04L-070 SYM	5	0.153 / 0.200	700 / 27.5	105 / 231	KSW03 SYM	2.6-3.5 / 5,720-7,700
B04L-080 SYM	5	0.180 / 0.235	800 / 31.4	121 / 266.2	KSW03 SYM	2.6-3.5 / 5,720-7,700
B05L-030 SYM	3	0.066 / 0.086	300 / 11.8	72 / 158.4	KSW03 SYM	3.5-5.0 / 7,700-11,00
B05L-040 SYM	3	0.096 / 0.125	400 / 15.7	79 / 173.8	KSW03 SYM	3.5-5.0 / 7,700-11,00
B05L-050 SYM	4	0.130 / 0.170	500 / 19.6	91 / 200.2	KSW03 SYM	3.5-5.0 / 7,700-11,00
B05L-060 SYM	4	0.162 / 0.211	600 / 23.6	101 / 222.2	KSW03 SYM	3.5-5.0 / 7,700-11,00
B05L-070 SYM	5	0.195 / 0.255	700 / 27.5	111 / 244.2	KSW03 SYM	3.5-5.0 / 7,700-11,00
B05L-080 SYM	5	0.230 / 0.300	800 / 31.4	126 / 277.2	KSW03 SYM	3.5-5.0 / 7,700-11,00
B06L-030 SYM	3	0.080 / 0.104	300 / 11.8	77 / 169.4	KSW03 SYM	4.5-6.0 / 9,900-13,20
B06L-040 SYM	3	0.120 / 0.156	400 / 15.7	88 / 193.6	KSW03 SYM	4.5-6.0 / 9,900-13,20
B06L-050 SYM	4	0.140 / 0.183	500 / 19.6	98 / 215.6	KSW03 SYM	4.5-6.0 / 9,900-13,20
B06L-060 SYM	4	0.180 / 0.235	600 / 23.6	108 / 237.6	KSW03 SYM	4.5-6.0 / 9,900-13,20
B06L-080 SYM	5	0.250 / 0.327	800 / 31.4	129 / 283.8	KSW03 SYM	4.5-6.0 / 9,900-13,20
B06L-100 SYM	5	0.320 / 0.418	1,000 / 39.3	149 / 327.8	KSW03 SYM	4.5-6.0 / 9,900-13,20
B08L-040 SYM	3	0.130 / 0.170	400 / 15.7	142 / 312.4	KSW08 SYM	5.5-8.5 / 12,100-18,70
B08L-050 SYM	4	0.170 / 0.222	500 / 19.6	158 / 347.6	KSW08 SYM	5.5-8.5 / 12,100-18,70
B08L-060 SYM	4	0.210 / 0.274	600 / 23.6	173 / 380.6	KSW08 SYM	5.5-8.5 / 12,100-18,70
B08L-080 SYM	5	0,300 / 0.392	800 / 31.4	213 / 468.6	KSW08 SYM	5.5-8.5 / 12,100-18,70
B08L-090 SYM	5	0.340 / 0.444	900 / 35.4	246 / 541.2	KSW08 SYM	5.5-8.5 / 12,100-18,70
B08L-100 SYM	5	0.380 / 0.497	1,000 / 39.3	268 / 589.6	KSW08 SYM	5.5-8.5 / 12,100-18,70
B10L-040 SYM	3	0.155 / 0.202	400 / 15.7	158 / 347.6	KSW08 SYM	8.0-10.0 / 17,600-22,0
B10L-050 SYM	4	0.200 / 0.261	500 / 19.6	177 / 389.4	KSW08 SYM	8.0-10.0 / 17,600-22,0
B10L-060 SYM	4	0.255 / 0.333	600 / 23.6	199 / 437.8	KSW08 SYM	8.0-10.0 / 17,600-22,0
B10L-080 SYM	5	0.360 / 0.470	800 / 31.4	224 / 492.8	KSW08 SYM	8.0-10.0 / 17,600-22,0
B10L-090 SYM	5	0.410 / 0.536	900 / 35.4	254 / 558.8	KSW08 SYM	8.0-10.0 / 17,600-22,0
B10L-100 SYM	5	0.460 / 0.601	1,000 / 39.3	269 / 591.8	KSW08 SYM	8.0-10.0 / 17,600-22,0
B12L-040 SYM	3	0.170 / 0.222	400 / 15.7	177 / 389.4	KSW08 SYM	8.0-10.0 / 17,600-22,0
B12L-050 SYM	4	0.225 / 0.294	500 / 19.6	186 / 409.2	KSW08 SYM	10.0-12.0 / 22,000-26,4
B12L-060 SYM	4	0.280 / 0.366	600 / 23.6	222 / 488.4	KSW08 SYM	10.0-12.0 / 22,000-26,4
B12L-080 SYM	5	0.395 / 0.516	800 / 31.4	249 / 547.8	KSW08 SYM	10.0-12.0 / 22,000-26,4
B12L-090 SYM	5	0.450 / 0.588	900 / 35.4	269 / 591.8	KSW08 SYM	10.0-12.0 / 22,000-26,4
B12L-100 SYM	5	0.430 / 0.588	1,000 / 39.3	282 / 620.4	KSW08 SYM	10.0-12.0 / 22,000-26,4

Package consists of: general bucket incl. teeth, adapter frame for L-Lock

The Ditch Cleaning Bucket is the perfect tool to excavate, load and backfill sand, gravel and soil. Ditch cleaning, grading and levelling of embankments and lawns as well as digging trenches, skips and slopes are other applications for the DC-L series. The integrated quick change adapter is adjusted to the system L-Lock and can be mounted both directions.

Can be used as backhoe bucket or face shovel (except DC01L).

Other adapters on request.

- ▶ Rear cutting edge by default (from DC02L).
- ▶ Long bucket base for easy penetration and high excavating capacity.
- Durable thanks to robust design and use of highly resistant wearout steel. Cutting edges 500HB, bucket base 400HB.
- ▶ For more flexibility best in combination with a tiltable quick coupler.



DC08L SYM

Туре	Volume	0			
	ISO 7451	Cutting width	Weight	Adapter	Operating weight
DC01L-080	(m³/yd³) 0.040 / 0.052	(mm/in) 800 / 31.4	(kg/lbs) 35 / 77	KSW01	(t/lbs) 0.5-1 / 1,100-2,200
DC01L-080 DC01L-100	0.050 / 0.065	1,000 / 39.3	40 / 88	KSW01	0.5-1 / 1,100-2,200
DC02L-085 SYM	0.077 / 0.100	850 / 33.4	75 / 165	KSW01 SYM	1.0-1.8 / 2,200-3,960
DC02L-003 31 M	0.077 / 0.100	1,000 / 39,3	86 / 189.2	KSW01 SYM	1.0-1.8 / 2,200-3,960
DC02L-100 SYM	0.117 / 0.153	1,200 / 47.2	103 / 226.6	KSW01 SYM	1.0-1.8 / 2,200-3,960
DC03L-085 SYM	0.077 / 0.100	850 / 33.4	76 / 167.2	KSW03 SYM	1.8-2.6 / 3,960-5,720
DC03L-100 SYM	0.092 / 0.120	1,000 / 39.3	88 / 193.6	KSW03 SYM	1.8-2.6 / 3,960-5,720
DC03L-100 SYM	0.117 / 0.153	1,200 / 47.2	99 / 217.8	KSW03 SYM	1.8-2.6 / 3,960-5,720
DC05L-100 SYM	0.150 / 0.196	1,000 / 39.3	107 / 235.4	KSW03 SYM	2.6-5.0 / 5,720-11,000
DC05L-120 SYM	0.180 / 0.235	1,200 / 47,2	117 / 257.4	KSW03 SYM	2.6-5.0 / 5,720-11,000
DC05L-140 SYM	0.208 / 0.272	1,400 / 55.1	129 / 283.8	KSW03 SYM	2.6-5.0 / 5,720-11,000
DC06L-100 SYM	0.160 / 0.209	1,000 / 39,3	107 / 235.4	KSW03 SYM	4.5-6.0 / 9.900-13.200
DC06L-120 SYM	0.200 / 0.261	1,200 / 47,2	117 / 257.4	KSW03 SYM	4.5-6.0 / 9,900-13,200
DC06L-140 SYM	0.240 / 0.313	1,400 / 55.1	129 / 283.8	KSW03 SYM	4.5-6.0 / 9,900-13,200
DC06L-150 SYM	0.260 / 0.340	1,500 / 59	135 / 297	KSW03 SYM	4.5-6.0 / 9,900-13,200
DC08L-140 SYM	0.270 / 0.353	1,400 / 55,1	203 / 446.6	KSW08 SYM	5.5-8.5 / 12.100-18.700
DC08L-150 SYM	0.280 / 0.366	1,500 / 59	217 / 477.4	KSW08 SYM	5.5-8.5 / 12,100-18,700
DC10L-150 SYM	0.350 / 0.457	1,500 / 59	225 / 495	KSW08 SYM	8.0-10.0 / 17,600-22,000
DC12L-160 SYM	0.440 / 0.575	1,600 / 62.9	349 / 767.8	KSW08 SYM	10.0-12.0 / 22,000-26,400

Package consists of: ditch cleaning bucket, rear cutting edge (from DC02L), adapter frame for L-Lock



DC02L SYM



DC10L SYM

#### Tilt Bucket System L-Lock 1-12t / 2,200-26,400lbs

The hydraulically driven tilt bucket with horizontal cylinder is ideal for all daily works in general construction. With a tilt angle of 90° (2 x 45°) it is perfect for levelling and grading as well as for the construction of trenches, skips and slopes.

The weld-on quick change adapter is compatible to the system L-Lock. Other adapters on request.

- ▷ Simple and robust design.
- > Rear cutting edge by default.
- > Cylinder with piston rod protection.
- ≥ 2 x 45° tilt angle.
- ▶ **Low maintenance** thanks to long-time grease filling in the tilt bearing.
- ▶ Long bucket base for easy penetration and high excavating capacity.
- ▶ Durable thanks to robust design and use of highly resistant wearout steel. Cutting edges 500HB, bucket base 400HB.



Tilt Bucket TB-L						
Туре	Tilt angle	Volume ISO 7451	Cutting width	Weight	Adapter	Operating weight
TB02L-085	2 x 45°	(m³/yd³) 0.077 / 0.100	(mm / in) 850 / 33.4	(kg/lbs) 116 / 255,2	KSW01	(t/lbs)
	-					1.0-1.8 / 2,200-3,960
TB02L-100	2 x 45°	0.092 / 0.120	1,000 / 39.3	132 / 290.4	KSW01	1.0-1.8 / 2,200-3,960
TB02L-120	2 x 45°	0.117 / 0.153	1,200 / 47.2	147 / 323.4	KSW01	1.0-1.8 / 2,200-3,960
TB03L-100	2 x 45°	0.092 / 0.120	1,000 / 39.3	137 / 301.4	KSW03	1.8-2.6 / 3,960-5,720
TB03L-120	2 x 45°	0.117 / 0.153	1,200 / 47.2	160 / 352	KSW03	1.8-2.6 / 3,960-5,720
TB05L-100	2 x 45°	0.150 / 0.196	1,000 / 39.3	150 / 330	KSW03	2.6-5.0 / 5,720-11,000
TB05L-120	2 x 45°	0.180 / 0.235	1,200 / 47.2	164 / 360.8	KSW03	2.6-5.0 / 5,720-11,000
TB05L-140	2 x 45°	0.210 / 0.274	1,400 / 55.1	178 / 391.6	KSW03	2.6-5.0 / 5,720-11,000
TB05L-150	2 x 45°	0.220 / 0.287	1,500 / 59	184 / 404.8	KSW03	2.6-5.0 / 5,720-11,000
TB06L-120	2 x 45°	0.200 / 0.261	1,200 / 47.2	170 / 374	KSW03	4.5-6.0 / 9,900-13,200
TB06L-140	2 x 45°	0.240 / 0.313	1,400 / 55.1	185 / 407	KSW03	4.5-6.0 / 9,900-13,200
TB06L-150	2 x 45°	0.260 / 0.340	1,500 / 59	195 / 429	KSW03	4.5-6.0 / 9,900-13,200
TB06L-160	2 x 45°	0.280 / 0.366	1,600 / 62.9	205 / 451	KSW03	4.5-6.0 / 9,900-13,200
TB08L-150	2 x 45°	0.290 / 0.379	1,500 / 59	350 / 770	KSW08	5.5-8.5 / 12,100-18,700
TB08L-160	2 x 45°	0.310 / 0.405	1,600 / 62.9	360 / 792	KSW08	5.5-8.5 / 12,100-18,700
TB08L-180	2 x 45°	0.350 / 0.457	1,800 / 70.8	380 / 836	KSW08	5.5-8.5 / 12,100-18,700
TB10L-150	2 x 45°	0.350 / 0.457	1,500 / 59	330 / 726	KSW08	8.0-10.0 / 17,600-22,000
TB10L-180	2 x 45°	0.420 / 0.549	1,800 / 70.8	390 / 858	KSW08	8.0-10.0 / 17,600-22,000
TB12L-160	2 x 45°	0.450 / 0.588	1,600 / 62.9	570 / 1254	KSW08	10.0-12.0 / 22,000-26,400
TB12L-180	2 x 45°	0.510 / 0.667	1,800 / 70.8	600 / 1320	KSW08	10.0-12.0 / 22,000-26,400

Package consists of: tilt bucket, rear cutting edge, KSW-adapter for L-Lock





TB10L

The perforated backwall or metal ribs of the rigid Sorting Bucket let sand and gravel through without larger pieces getting caught. The bucket is thus the perfect tool for sorting debris or bulk material. The weld-on quick change adapter is compatible to the system L-Lock. Other adapters on request.

- ▶ Robust design.
- ▶ Long bucket base for easy penetration and high excavating capacity.
- ▶ Durable thanks to robust design and use of highly resistant wearout steel. Cutting edges 500HB, bucket base 400HB.
- ⊳ SB02L SB06L: perforated wall. SB08L SB12L: metal ribs.
- > Including shell teeth.



SB04L SYM

Sorting Bucket SB-L						
Туре	Number of teeth	Volume ISO 7451 (m³/yd³)	Cutting width (mm/in)	Weight (kg/lbs)	Adapter	Operating weight (t/lbs)
SB02L-050	4	0.050 / 0.065	500 / 19.6	43 / 94.6	KSW01	1.0-1.8 / 2,200-3,960
SB02L-060	4	0.060 / 0.078	600 / 23.6	47 / 103.4	KSW01	1.0-1.8 / 2,200-3,960
SB03L-060	4	0.097 / 0.126	600 / 23.6	63 / 138.6	KSW03	1.8-2.6 / 3,960-5,720
SB03L-070	5	0.117 / 0.153	700 / 27.5	67 / 147.4	KSW03	1.8-2.6 / 3,960-5,720
SB04L-060	4	0.127 / 0.166	600 / 23.6	83 / 182.6	KSW03	2.6-3.5 / 5,720-7,700
SB04L-080	5	0.180 / 0.235	800 / 31.4	108 / 237.6	KSW03	2.6-3.5 / 5,720-7,700
SB05L-060	4	0.162 / 0.211	600 / 23.6	98 / 215.6	KSW03	3.5-5.0 / 7,700-11,000
SB05L-080	5	0.230 / 0.300	800 / 31.4	117 / 257.4	KSW03	3.5-5.0 / 7,700-11,000
SB06L-080	5	0.250 / 0.327	800 / 31.4	120 / 264	KSW03	4.5-6.0 / 9,900-13,200
SB06L-100	5	0.320 / 0.418	1,000 / 39.3	138 / 303.6	KSW03	4.5-6.0 / 9,900-13,200
SB08L-080	5	0.300 / 0.392	800 / 31.4	240 / 528	KSW08	5.5-8.5 / 12,100-18,700
SB08L-100	5	0.380 / 0.497	1,000 / 39.3	275 / 605	KSW08	5.5-8.5 / 12,100-18,700
SB10L-080	5	0.360 / 0.470	800 / 31.4	245 / 539	KSW08	8.0-10.0 / 17,600-22,000
SB10L-100	5	0.460 / 0.601	1,000 / 39.3	299 / 657.8	KSW08	8.0-10.0 / 17,600-22,000
SB12L-100	5	0.510 / 0.667	1,000 / 39.3	309 / 679.8	KSW08	10.0-12.0 / 22,000-26,400
SB12L-120	6	0.620 / 0.810	1,200 / 47.2	399 / 877.8	KSW08	10.0-12.0 / 22,000-26,400

Package consists of: sorting bucket incl. teeth, adapter frame for L-Lock



#### Screening Bucket 5-14t / 11,000-30,800lbs

**VMS** 

The innovative screening bucket "Multiscreening" has two screening drums, one inside the other. The setting of the grain size is variable and takes place hydraulically from the cab - no time-consuming replacement of mechanical elements.

The screening bucket is available for excavators with an operating weight of up to 35t / 77,000 lbs.

- ▶ Individual setting of the screening size during the screening process hydraulically from the driver's cab.
- ▷ Screening range adjustable from 25 mm / 0.98 in up to 60 mm / 2.36 in.
- ▶ **Robust design** due to the use of HB400 steel for both screening drums.
- **▶** High screening performance for different materials.
- ▷ Option: teeth.

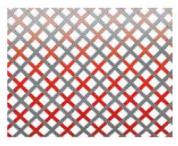


Screening Bucket VMS									
Туре	Width	Length	Height w/o adapter	Drum diameter	Weight w/o adapter	Volume	Operating weight		
	(mm/in)	(mm/in)	(mm/in)	(mm/in)	(kg/lbs)	(liter/c.y.)	(t/lbs)		
VMS7	800 / 31.5	1,200 / 47.2	930 / 36.6	650 / 25.6	372 / 818	180 / 0.24	5 - 7.5 / 11,000 - 16,500		
VMS10	900 / 35.4	1,400 / 55.1	1,000 / 39.4	760 / 29.9	434 / 955	290 / 0.38	7.5 - 10 / 16,500 - 22,000		
VMS14	1,000 / 39.4	1,550 / 61.0	1,120 / 44.1	870 / 34.3	640 / 1408	420 / 0.55	10 - 14 / 22.000 - 30.800		

Package consists of: screening bucket

Requirements of carrier machine		
	VMS7 / VMS10	VMS14
Operating pressure:	max. 35 MPa (350 bar) / 5,040 psi	max. 35 MPa (350 bar) / 5,040 psi
Recommended pump capacity:	min. 15 - max. 80 l/min / min. 4.0 - max. 21.1 GPM	min. 30 - max. 150 l/min / min. 7.9 - max. 39.6 GPM

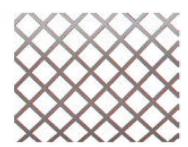
#### Technical drawing



25 mm / 0.98 in



intermediate position



60 mm / 2.36 in

#### Cone Crusher 3-10t / 6,600-22,000lbs

#### **Cone Crusher**

The Cone Crusher for excavators from 3t - 10t / 6,600 - 22,000 lbs offers a simple, efficient and economical solution for the processing or recycling of small volumes of construction rubble and demolition material into usable aggregate/filling material. Suitable for attachment to excavators, backhoe loaders, mini loaders, skid steers and telehandlers.

- ▶ Effective lifting and sorting through the shovel opening.
- ⊳ Seven-sided, rotating cone in a cylindrical drum.
- ▶ Crushing surfaces made of steel and hard metal.
- ▶ Easy to use and compact for small construction sites.



Cone Crusher						
Туре	Torque	Rotations	Drum diameter	Length	Weight	Operating weight
	(Nm/ft.lbs)	(RPM)	(mm/in)	(mm/in)	(kg/lbs)	(t/lbs)
Cone Crusher	6,320 - 10,112	26 - 57	600 / 23.62	1,300 / 51.18	376 / 827.2	3 - 10 / 6,600 - 22,000
Package consists						

#### Package consists of: cone crusher

Different mounting options on request

#### Mounting options

#### Two-bolt suspension:







Mounting frame:







#### Multi Purpose Grabs 1-6t / 2,200-13,200lbs

Robust multi purpose grab for excavators up to 6t/13,200lbs operating weight - ideal for landscaping architecture.

- ▶ **Efficient tool** for the exact positioning of natural rocks and for the handling of filling material - without additional set-up times.
- ▶ The **sophisticated ergonomics** and the design of the shells enables loading, sorting, digging and demolition operations with maximum efficiency.
- ▶ Rigid mounting and 360° rotator for precise positioning!
- ▶ Long life is ensured due to the use of 400HB steel in the manufacture of cutting edges (A02H: 500HB).
- **▷** Exchangeable teeth.
- > Integrated non-return valve guarantees secure retention of the loads.
- ▶ Optional: accessories such as **bolt-on side walls** and **4-Grip**.



Multi Purpose Grabs A02H / A04H / A06H									
Туре	Width	Opening A	Height C max.	Volume	Teeth	Weight	Load capacity*	Operating weight	
	(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	(#)	(kg/lbs)	(kg/lbs)	(t/lbs)	
A02H-30	300 / 11.8	780 / 30.7	730 / 28.7	35 / 0.05	3	135 / 297	1,000 / 2,200	1 - 2 / 2,200 - 4,400	
A04H-40	386 / 15.1	1,233 / 48.5	769 / 30.7	70 / 0.09	3	198 / 435	1,500 / 3,300	2 - 4 / 4,400 - 8,800	
A06H-45	450 / 17.7	1,340 / 52.7	824 / 32.4	100 / 0.13	5	220 / 484	2,000 / 4,400	4 - 6 / 8,800 - 13,200	
*) the load capa	city indicated dene	ends on the charac	cteristics of the l	oad (surface, lar	geness etc.)				

Package consists of: multi purpose grab, bolt-on teeth, KINSHOFER rotator and non-return valve

#### KINSHOFER Rotator

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Upper dimension (hole/Ø-hole pattern) (mm/in)	<b>Torque</b> (Nm/ft.lb)	Bending moment max. (Nm/ft.lb)
A02H: KM 04 F140/150	10 x M 12; Ø 150 / 5.9	850 / 626	3,000 / 2,212
A04H - A06H: KM 10 F214/180	6 x M 16; Ø 180 / 7.0	1,000 / 737	12,000 / 8,850

Accessories	
Accessories	

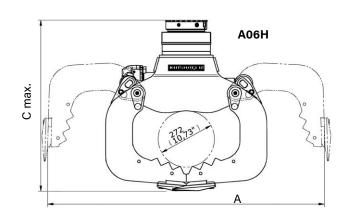
Туре	Desription
KM 691 2t	adapter plate for specific solutions – up to 2t/4,400lbs
KM 690 2t	adapter for rigid mounting - up to 2t/4,400lbs
KM 691 8t	adapter plate for specific solutions – up to 8t/17,600lbs
KM 690 8t	adapter for rigid mounting – up to 8t/17,600lbs
KSW01 rigid	bolt-on adapter for system L-Lock KMS01L/KHS01L for rigid mounting – up to 2t/4,400lbs
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t/13,200lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa/3,770psi, incl. parts and mounting
KM 685 09E-A02-A09	bolt-on side walls for A04 up to A09
KM 685 05-D04-A04	4-Grip for D04/A04 (load capacity: 600 kg / 1,320 lbs)
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

Requirements of carrier machine		
	A02H	A04H / A06H
Operating pressure (open/close):	max. 20 MPa (200 bar) / 2,880 psi	max. 25 MPa (250 bar) / 3,620 psi
Recommended pump capacity (open/close):	10 - 40 l/min / 2.5 - 10.5 GPM	25 - max. 75 l/min / 6.5 - max. 20 GPM
Operating pressure (rotate):	max. 32 MPa (320 bar) / 4,640 psi	max. 32 MPa (320 bar) / 4,640 psi
Recommended pump capacity (rotate):	15 - max. 50 l/min / 4 - max. 13 GPM	15 - max. 50 l/min / 4 - max. 13 GPM

#### Technical drawing



optional 4-Grip gripping device, here mounted to a A04H



A09H

#### Multi Purpose Grab 6-9t / 13,200-19,800lbs

New robust multi purpose grab for excavators up to 9t / 19,800lbs operating weight - ideal for landscaping architecture.

- ▶ Efficient tool for the exact positioning of natural rocks and for the handling of filling material - without additional set-up times.
- The **sophisticated ergonomics** and the design of the shells enables loading, sorting, digging and demolition operations with maximum efficiency.
- ▶ Rigid mounting and flat 360° rotator for precise positioning!
- Long life due to the use of highly wear resistant material 400HB. Exchangeable teeth.
- ▷ Optional: accessories such as bolt-on side walls and 4-Grip.



Multi Purpose Grab A09H								
Туре	Width	Opening A	Height C max.	Volume	Teeth	Weight	Load capacity*	
	(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	(#)	(kg/lbs)	(kg/lbs)	
A09H-50	500 / 19.6	1,650 / 64.9	1,000 / 39.3	175 / 0.23	5	350 / 770	2,500 / 5,500	
at 1 1 1 1.	the state of the state of							

<sup>\*)</sup> the load capacity indicated depends on the characteristics of the load (surface, largeness etc.)

Package consists of: multi purpose grab, bolt-on teeth, KINSHOFER rotator and non-return valve

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Type Upper dimension		Bending moment max.	
	(hole/Ø-hole pattern)		max.	
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)	
KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875	

Accessories	
Туре	Desription
KM 691 8t	adapter plate for specific solutions – up to 8t/17,600lbs
KM 690 8t	adapter for rigid mounting – up to 8t/17,600lbs
OQ45/4 rigid	bolt-on adapter for Oilquick OQ45 - 5t/11000lbs to 12t/26,400lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting - up to 12t/26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa/3,770psi, incl. parts and mounting
KM 685 09E-A02-A09	bolt-on side walls for A04 up to A09

4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

#### Requirements of carrier machine

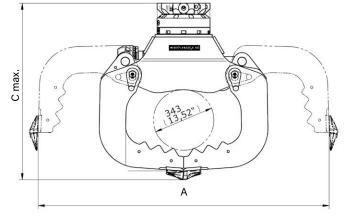
KM 685 05-D06/09-A06/09

max. 32 MPa (320 bar) / 4,640 psi Operating pressure (open/close): 25 - max. 90 l/min / 6.5 - max. 24 GPM Recommended pump capacity (open/close): Operating pressure (rotate): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (rotate): 20 - max, 50 l/min / 5 - max, 13 GPM

#### Technical drawing



here mounted to a A09H





optional bolt-on side walls

#### Multi Purpose Grab with #PXdrive 1-6t / 2,200-13,200lbs

#### A02/A04/A06HPX

A02HPX

The new multi purpose grabs with the low maintenance *HPXdrive* for excavators up to 2t/4,400lbs, 4t/8,800lbs or 6t/13,200lbs operating weight – THE ideal and productive tool for landscaping as it allows the precise positioning of natural stones and exact placing of loose fill material too.

- HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required!
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- ▶ The sophisticated ergonomics and the design of the shells enables loading, sorting, digging and demolition operations with maximum efficiency.
- ▶ **Constant closing force** during the entire operation.
- Different applications possible thanks to easy shell exchange system (from A04HPX).
- ▶ Optional: accessories available like **bolt-on side plates** and **4-Grip**.



Multi Purpose Grabs A02HPX / A04HPX / A06HPX								
Туре	Width	Opening A	Height C max.	Teeth	Volume	Weight	Load capacity*	Operating weight
	(mm/in)	(mm/in)	(mm/in)	(#)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	(t/lbs)
A02HPX-30	300 / 11.8	888 / 35.0	466 / 18.3	3	21 / 0.03	90.5 / 199	1,000 / 2,200	1 - 2.7 / 2,200 - 5,940
A04HPX-40	386 / 15.1	1,043 / 41.0	822 / 32.3	3	70 / 0.09	270 / 594	1,500 / 3,300	2 - 4 / 4,400 - 8,800
A06HPX-45	450 / 17.7	1,344 / 52.9	982 / 38.6	5	145 / 0.19	340 / 748	2,000 / 4,400	4 - 6 / 8,800 - 13,200

<sup>\*</sup> the load capacity indicated depends on the characteristics of the load (surface, largeness etc.)

Package consists of: multi purpose grab, bolt-on teeth, KINSHOFER rotator and non-return valve

#### KINSHOFER Rotator

Integrated in a single unit with HPXdrive, no more connecting hoses. Continuous rotation. Overload protection by pressure relief valves.

Туре	Upper dimension (hole/Ø-hole pattern) (mm/in)	<b>Torque</b> (Nm/ft.lb)	Bending moment max. (Nm/ft.lb)
A02HPX: KM 04 F140/150	10 x M 12 / Ø 150 / 5.9	850 / 627	3,000 / 2,213
A04HPX - A06HPX: KM 10 F214/180	6 x M16; Ø 180 / 7.0	1,000 / 737	12,000 / 8,850

-		
Acces	sor	ies

Туре	Description
KM 691	adapter plate for specific solutions
KM 690	adapter for rigid mounting
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t/13,200lbs
-	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa / 3,770psi, incl. parts and mounting
KM 685 09E-A02-A09	bolt-on side walls for A04 to A09
KM 685 05-D02-A02	4-Grip for D02/A02 (load capacity: 350 kg / 770 lbs)
KM 685 05-D04-A04	4-Grip for D04/A04 (load capacity: 600 kg / 1,320 lbs)
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

#### Requirements of carrier machine

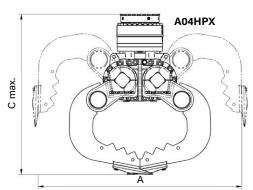
#### Operating pressure at pump capacity (open/close):

operating pressure at pump capacity (open	/ Close / .	
A02HPX: 21 MPa (210 bar) at max. 40 l/min /	A04HPX: 19 MPa (190 bar) at max. 75 I/min /	A06HPX: 26 MPa (260 bar) at max. 75 l/min /
3,024 psi at max. 10.6 GPM	2,740 psi at max. 20 GPM	3,745 psi at max. 20 GPM
	A04HPX: 19 - 32 MPa (190 - 320 bar) at max. 40 I/min / 2,740 - 4,640 psi at max. 10.6 GPM	

#### Operating pressure at pump capacity (rotate):

A02HPX: 32 MPa (320 bar) at 10 - 40 I/min / 4,640 psi at 2.6 - 10.6 GPM A04HPX: 32 MPa (320 bar) at 20 - 50 I/min / 4,640 psi at 2.6 - 10.6 GPM A04HPX: 32 MPa (320 bar) at 20 - 50 I/min / 4,640 psi at 5.3 - 13 GPM

#### Technical drawings









The new multi purpose grabs with the low maintenance HPX drive for excavators up to 9t/19,800lbs operating weight - THE ideal and productive tool for landscaping as it allows the precise positioning of natural stones and exact placing of loose fill material too.

- > **HPXdrive** the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required!
- > 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- The **sophisticated ergonomics** and the design of the shells enables loading, sorting, digging and demolition operations with maximum efficiency.
- ▶ **Constant closing force** during the entire operation.
- ▶ Different applications possible thanks to easy **shell exchange system**.
- ▷ Optional: accessories available like bolt-on side plates and 4-Grip.



Multi Purpose Grab A09HPX								
Туре	Width	Opening A	Height C max.	Teeth	Volume	Weight	Load capacity*	
	(mm/in)	(mm/in)	(mm/in)	(#)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	
A09HPX-50	500 / 19.7	1,545 / 60.8	1,087 / 42.8	5	210 / 0.27	407 / 895	2,500 / 5,500	
* the load canacity inc	* the load canacity indicated depends on the characteristics of the load (surface largeness etc.)							

the load capacity indicated depends on the characteristics of the load (surface, largeness etc.)

Package consists of: multi purpose grab, plug-in teeth, KINSHOFER rotator and non-return valve

#### **KINSHOFER** Rotator

Integrated in a single unit with **HPXdrive**, no more connecting hoses. Continuous rotation. Overload protection by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment max.	
	(hole/Ø-hole pattern) (mm/in)	(Nm/ft.lbs)	max. (Nm/ft.lbs)	
KM 15 F273/273	10 x M16; Ø 273	2,000 / 1,475	50,000 / 36,875	

Accessories	
Туре	Description
KM 691 8t	adapter plate for specific solutions - up to 8t/17,600lbs
KM 690 8t	adapter for rigid mounting - up to 8t/17,600lbs
OQ45/4 rigid	bolt-on adapter for Oilquick OQ45 – 5t/11000lbs to 12t/26,400lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa / 3,770psi, incl. parts and mounting
KM 685 09E-A02-A09	bolt-on side walls for A04 to A09
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

#### Requirements of carrier machine

#### Operating pressure at pump capacity (open/close):

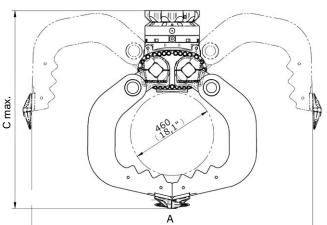
26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM

26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM

#### Operating pressure at pump capacity (rotate):

32 MPa (320 bar) at 20 - 50 l/min / 4,640 psi at 5.3 - 13 GPM

## Technical drawings





optional 4-Grip gripping device



free extension of warranty kinshofer.com/service



optional bolt-on side walls

#### 4-Grip for D- and A-Grab Series up to 9t / 19,800lbs

The device is simply attached to the bottom of the shells and you can grip concrete parts, curbs, etc. precisely, safely and without damage. The 4-Grip is simply plugged onto the grab shells and secured with a folding pin. The gripper teeth must not be removed, which significantly reduces assembly

Thanks to its special kinematics you can grab items not only when closing the shells but also when opening. Shaft rings can be loaded and unloaded fast and easy without damaging them!

- ▶ **Economic solution**, as it is only an accessory that increases the flexibility of your attachment.
- ▶ Robust design.
- ▶ Plastic compression rolls avoid damage of the material to be gripped.
- > Fast and easy mounting and removal on site.
- ▶ Low additional weight: only 28kg/61.6lbs in total.
- ▶ High load capacities:

for A02HPX/D02HPX: 350 kg / 770 lbs

for A04H/A04HPX and D04H/D04HPX: 600 kg / 1,320 lbs

for A06H/A06HPX and D06H/D06HPX: 600 kg / 1,320 lbs

for A09H/A09HPX and D09H/D09HPX: 900 kg / 1,980 lbs



KM 685 05-D-A







Precise gripping of very narrow objects



Careful gripping of plain, slippery surfaces



Safe inside gripping without retooling







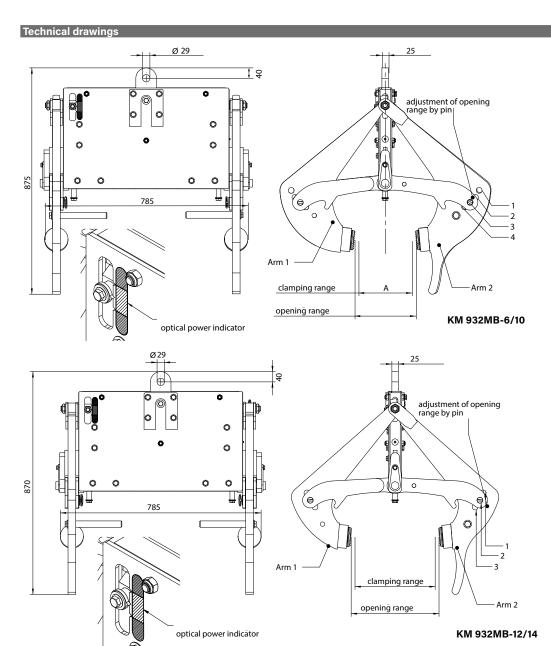
**KM 932MB** 

The KM 932MB barrier lifter is a mechanical grab for fast and convenient handling of concrete barriers and blocks.

- > Safe: Carbide gripping pads ensure safe operation, even on wet or coated surfaces.
- ▶ **Efficient**: The fully integrated, mechanically operated "latch & release" system allows the unit to function independently, without assistance from an additional operative.
- ▶ **Versatile**: Multi-position arms are a standard feature. This means one unit can achieve different gripping ranges by simply changing the position of four pins.
- ▶ Cost-effective: The elimination of slings and chains means more cycles can be achieved per hour.
- ▶ Fast: The "latch & release" system.



Barrier Lifter KM 932MB						
Туре	Gripping range A	Width E	Weight	Load capacity	Operating weight	
	(mm/in)	(mm/in)	(kg/lbs)	(kg/lbs)	(t/lbs)	
KM 932MB-6/10	115 - 305 / 4.5 - 12.0	760 / 29.9	162 / 356	6,580 / 14,476	< 27 / < 59,400	
KM 932MB-12/14	295 - 395 / 11.6 - 15.6	760 / 29.9	150 / 330	6,580 / 14,476	< 27 / < 59,400	



## Multi Purpose Grab with cylinder 8-12t / 17,600-26,400lbs

Robust multi purpose grab for excavators up to 12t / 26,400lbs operating weight - ideal for landscaping architecture.

- ▶ **Efficient tool** for the exact positioning of natural rocks and for the handling of filling material - without additional set-up times.
- The **sophisticated ergonomics** and the design of the shells enables loading, sorting, digging and demolition operations with maximum efficiency.
- The grab needs three circuits incl. bucket cylinder. As an alternative to the third oil circuit, the function grab and rotate can be realized by a solenoid valve.
- ▶ Long life is ensured due to the use of 500HB steel in the manufacture of cutting edges.
- ▶ Rigid mounting and flat 360° rotator for precise positioning!



Multi Purpos	se Grab A12H								
Туре	Width E	Opening A	Height C max.	Gripping range D min.	Volume	Teeth	Weight	Load capacity	Closing force
	(mm/in)	(mm/in)	(mm/in)	(Ø mm/in)	(liter/c.y.)	(#)	(kg/lbs)	(kg/lbs)	(kN/lbf)
A12H-60	600 / 23.6	1,870 / 73.6	1,350 / 53.1	605 / 23.8	260 / 0.34	5	550 / 1,210	3,000 / 6,600	30 / 6,600

Package consists of: multi purpose grab, plug-in teeth, KINSHOFER rotator and non-return valve

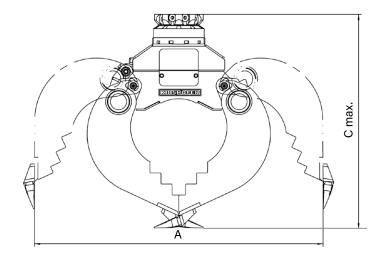
Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

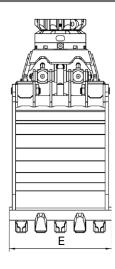
Туре	Upper dimension	Torque	Bending moment
	(hole/Ø-hole pattern)		max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875

Туре	Description
KM 690 15t	adapter for rigid mounting – up to 15t/33,000lbs
OQ45/4 rigid	bolt-on adapter for Oilquick OQ45 - up to 12t/26,400lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t/26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa/3,770psi, incl. parts and mounting

#### Requirements of carrier machine

Operating pressure (open/close):	max. 32 MPa (320 bar) / 4,640 psi
Recommended pump capacity (open/close):	75 - max. 150 l/min / 20 - max. 40 GPM
Hydraulic connection (open/close):	G 3/4" / G 1/2"
Operating pressure (rotate):	max. 35 MPa (350 bar) / 5,070 psi
Recommended pump capacity (rotate):	20 - max. 50 l/min / 5 - max. 13 GPM





The demolition and sorting grabs for excavators with 1t / 2,200lbs up to 6t / 13,200lbs operating weight – THE universal tool for lighter demolition and sorting tasks of all kinds.

- ▶ Including 360° rotator with low height.
- ▶ **Perforated skin of shells** lets dust and gravel through.
- Durable, extremely robust due to the use of cutting edge material 500HB steel.
- ▶ **Integrated non-return valve** guarantees secure retention of loads.
- High closing force achieved by horizontal cylinder D02H: 20kN/4,400lbf at 20MPa/2,880psi; D04H: 21,5kN/4,730lbf & D06H: 21kN/4,620lbf at 25MPa/3,620psi.



Abbruch- und Sortiergreifer D02H / D04H / D06H							
Туре	Width	Opening A	Height C max.	Volume	Capacity*	Weight	Operating weight
	(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	(t/lbs)
D02H-30	300 / 11.8	792 / 31.2	770 / 30.3	35 / 0.05	1,000 / 2,200	115 / 253	1 - 2 / 2,200 - 4,400
D04H-40	420 / 16.5	1,212 / 47.7	747 / 29.4	60 / 0.08	1,500 / 3,300	200 / 440	2 - 4 / 4,400 - 8,800
D06H-45	470 / 18.5	1,345 / 52.9	817 / 31.1	90 / 0.12	2,000 / 4,400	227 / 499	4 - 6 / 8,800 - 13,200

<sup>\*)</sup> the load capacity indicated depends on the characteristics of the load (surface, largeness etc.)

Package consists of: demolition and sorting grab, KINSHOFER rotator, non-return valve, wear plates

#### KINSHOFER Rotator

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

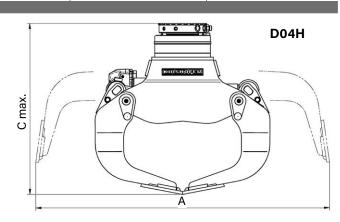
Туре	Upper dimension (hole/Ø-hole pattern) (mm/in)	<b>Torque</b> (Nm/ft.lbs)	Bending moment max. (Nm/ft.lbs)
D02H: KM 04 F140/150	10 x M 12; Ø 150 / 5.9	850 / 626	3,000 / 2,212
D04H - D06H: KM 10 F214/180	6 x M 16; Ø 180 / 7	1,000 / 737	12,000 / 8,850

Acces	

Туре	Description
KM 691 2t	adapter plate for specific solutions - up to 2t / 4,400 lbs
KM 690 2t	adapter for rigid mounting - up to 2t / 4,400 lbs
KM 691 8t	adapter plate for specific solutions – up to 8t / 17,600 lbs
KM 690 8t	adapter for rigid mounting – up to 8t / 17,600 lbs
KSW01 rigid	bolt-on adapter for system L-Lock KMS01L/KHS01L for rigid mounting – up to 2t / 4,400 lbs
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t / 13,200 lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26 MPa / 3,770 psi, incl. parts and mounting
KM 685 05-D04-A04	4-Grip for D04/A04 (load capacity: 600 kg / 1,320 lbs)
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

Requirements of carrier machine			
	D02H	D04H	D06H
Operating pressure (open/close):	max. 20 MPa (200 bar)	max. 25 MPa (250 bar)	max. 25 MPa (250 bar)
	max. 2,880 psi	max. 3,620 psi	max. 3,620 psi
Recommended pump capacity (open/close):	10 - 40 l/min	25 - 75 l/min	25 - 75 l/min
	2.5 - 10.5 GPM	6.5 - 20 GPM	6.5 - 20 GPM
Operating pressure (rotate):	max. 32 MPa (320 bar)	max. 32 MPa (320 bar)	max. 32 MPa (320 bar)
	max. 4,640 psi	max. 4,640 psi	max. 4,640 psi
Recommended pump capacity (rotate):	15 - max. 50 l/min	15 - max. 50 l/min	15 - max. 50 l/min
	4 - max. 13 GPM	4 - max. 13 GPM	4 - max. 13 GPM





**D09H** 

## Demolition and Sorting Grab 6-9t / 13,200-19,800lbs

The new demolition and sorting grabs for excavators with 6t / 13,200lbs to 9t / 19,800lbs operating weight - THE universal tool for lighter demolition and sorting tasks of all kinds.

- ▶ New improved shell design!
- ▶ Including 360° rotator with low height.
- ▶ **Perforated skin of shells** lets dust and gravel through.
- Durable, extremely robust due to the use of cutting edge material 500HB steel.
- > Integrated non-return valve guarantees secure retention of loads.
- ▶ High closing force achieved by horizontal cylinder (24kN/5,280lbf at 25MPa/3,620psi).



Demolition	and Sorting Grab D09H					
Туре	Width	Opening	Height	Volume	Load capacity*	Weight
		Α	C max.		form locking	
	(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)
D09H-50	520 / 20.4	1,665 / 65.5	973 / 38.3	165 / 0.22	2,500 / 5,500	355 / 781
45 41 1 1						

<sup>\*)</sup> the load capacity indicated depends on the characteristics of the load (surface, largeness etc.)

Package consists of: demolition and sorting grab, KINSHOFER rotator, non-return valve, wear plates

#### KINSHOFER Rotator

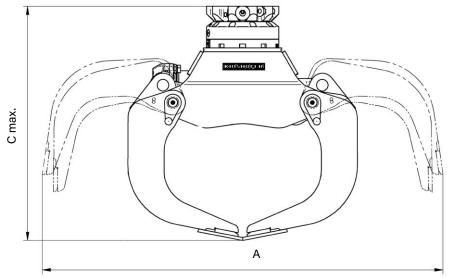
Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment
	(hole/Ø-hole pattern)		max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875

Туре	Description
KM 691 8t	adapter plate for specific solutions - up to 8t / 17,600lbs
KM 690 8t	adapter for rigid mounting – up to 8t / 17,600lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t / 26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa / 3,770psi, incl. parts and mounting
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

#### Requirements of carrier machine

Operating pressure (open/close): max. 32 MPa (320 bar) / max. 4,640 psi Recommended pump capacity (open/close): 25 - 75 l/min / 6.5 - 20 GPM Operating pressure (rotate): max. 32 MPa (320 bar) / max. 4,640 psi Recommended pump capacity (rotate): 20 - max. 50 l/min / 5 - max. 13 GPM





optional 4-Grip gripping device, here mounted to a D09H

## Demolition and Sorting Grabs with HPXdrive

### D02HPX / D04HPX / D06HPX

The new demolition and sorting grabs with the low maintenance *HPXdrive* for excavators up to 2t / 4,400lbs, 4t / 8,800lbs or 6t / 13,200lbs operating weight. THE universal tool for all kind of light demolition and sorting work.

- HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston.
  No hydraulic cylinder required!
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- New improved shell design! The perforated skin of the shells lets dust and fine gravel through – without larger pieces blocking the shell filter system.
- > Including the new, flat 10t-rotator with 360° endless rotation for precise positioning!
- Constant closing force (D02: 14 kN / 3,147 lbf at 21 MPa / 3,024 psi; D04: 18 kN / 3,960 lbf at 25 MPa / 3,620 psi and D06: 18 kN / 3,960 lbf at 26 MPa / 3,770 psi) during the entire operation.
- ▷ Different applications possible thanks to easy shell exchange system (from D04HPX).
- Robust due to the use of cutting edge material 500 HB steel. Cutting edges usable both sides.



Demolition and Sorting Grab D02HPX / D04HPX / D06HPX							
Туре	Width	Opening A	Height C max.	Volume	Weight	Load capacity*	Operating weight
	(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	(t/lbs)
D02HPX-30	320 / 12.6	888 / 35.0	463 / 18.2	21 / 0.03	90.5 / 199	1,000 / 2,200	1 - 2.7 / 2,200 - 5,940
D04HPX-40	420 / 16.5	1,045 / 41.1	812 / 31.9	75 / 0.10	280 / 616	1,500 / 3,300	2 - 4 / 4,400 - 8,800
D06HPX-45	470 / 18.8	1,350 / 53.1	970 / 38.1	150 / 0.20	340 / 748	2,000 / 4,400	4 - 6 / 8,800 - 13,200
*\ +b = lead =====:+::			of the lead (accuses	- laumamana ata \			

<sup>\*)</sup> the load capacity indicated depends on the characteristics of the load (surface, largeness etc.)

Package consists of: demolition and sorting grab, KINSHOFER rotator, non-return valve, wear plates

#### KINSHOFER Rotator

Integrated in a single unit with HPXdrive, no more connecting hoses. Continuous rotation. Overload protection by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment max.
	(hole/Ø-hole pattern) (mm/in)	(Nm/ft.lb)	(Nm/ft.lb)
D02HPX: KM 04 F140/150	10 x M 12 / Ø 150 / 5.9	850 / 627	3,000 / 2,213
D04HPX - D06HPX: KM 10 F214/180	6 x M16; Ø 180 / 7.0	1,000 / 737	12,000 / 8,850

Accessories	
Туре	Description
KM 691	adapter plate for specific solutions
KM 690	adapter for rigid mounting
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t / 13,200 lbs
-	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa / 3,770psi, incl. parts and mounting
KM 685 05-D02-A02	4-Grip for D02/A02 (load capacity: 350 kg / 770 lbs)
KM 685 05-D04-A04	4-Grip for D04/A04 (load capacity: 600 kg / 1,320 lbs)
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

#### Requirements of carrier machine

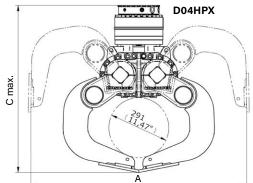
#### Operating pressure at pump capacity (open/close):

D02HPX: 21 MPa (210 bar) at max. 40 l/min / 3,024 psi at max. 10.6 GPM	D04HPX: 19 MPa (190 bar) at max. 75 l/min / 2,740 psi at max. 20 GPM	D06HPX: 26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM
	D04HPX: 19 - 32 MPa (190 - 320 bar) at max. 40 l/min / 2,740 - 4,640 psi at max. 10.6 GPM	D06HPX: 26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM

#### Operating pressure at pump capacity (rotate):

D02HPX: 32 MPa (320 bar) at 10 - 40 I/min / D04HPX: 32 MPa (320 bar) at 15 - 50 I/min / D06HPX: 32 MPa (320 bar) at 20 - 50 I/min / 4,640 psi at 2.6 - 10.6 GPM D04HPX: 32 MPa (320 bar) at 20 - 50 I/min / 4,640 psi at 5.3 - 13 GPM

#### Technical drawings







of warranty kinshofer.com/service

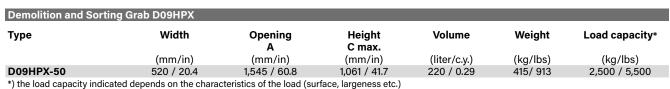
optional 4-Grip gripping device, here mounted to a D04HPX

D09HPX

## Demolition and Sorting Grab with HPXdrive

The new demolition and sorting grabs with the low maintenance HPXdrive for excavators up to 9t / 19,800lbs operating weight - THE universal tool for all kind of light demolition and sorting work.

- > HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required!
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- New improved shell design! The perforated skin of the shells lets dust and fine gravel through - without larger pieces blocking the shell filter system.
- > Including the flat 15t-rotator with 360° endless rotation for precise positioning!
- Constant closing force (15,3 kN / 3,366 lbf at 26 MPa / 3,770 psi) during the entire operation.
- Different applications possible thanks to easy **shell exchange system**.
- Robust due to the use of cutting edge material 500HB steel. Cutting edges usable both sides.



Package consists of: demolition and sorting grab, KINSHOFER rotator, non-return valve, wear plates

Integrated in a single unit with HPXdrive, no more connecting hoses. Continuous rotation. Overload protection by pressure relief valves.

Тур	Upper dimension	Torque	Bending moment
	(hole/Ø-hole pattern)		max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875

Accessories	
Туре	Description
KM 691 8t	adapter plate for specific solutions – up to 8t / 17,600lbs
KM 690 8t	adapter for rigid mounting - up to 8t / 17,600lbs
OQ45/4 rigid	bolt-on adapter for Oilquick OQ45 - 5t / 11,000lbs to 12t / 26,400lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t / 26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26 MPa / 3,770 psi, incl. parts and mounting
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity: 600 kg / 1,320 lbs) and D09/A09 (load capacity: 900 kg / 1,980 lbs)

#### Requirements of carrier machine

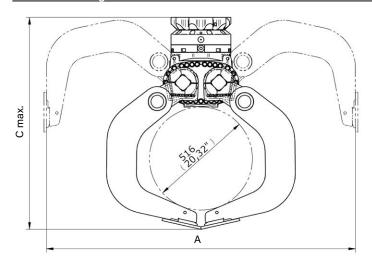
#### Operating pressure at pump capacity (open/close):

26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM

26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM

#### Operating pressure at pump capacity (rotate):

32 MPa (320 bar) at 20 - 50 l/min / 4,640 psi at 5.3 - 13 GPM







optional 4-Grip gripping device, here mounted to a D09HPX

## 4-Grip for D- and A-Grab Series up to 9t / 19,800lbs

The device is simply attached to the bottom of the shells and you can grip concrete parts, curbs, etc. precisely, safely and without damage. The 4-Grip is simply plugged onto the grab shells and secured with a folding pin. The gripper teeth must not be removed, which significantly reduces assembly

Thanks to its special kinematics you can grab items not only when closing the shells but also when opening. Shaft rings can be loaded and unloaded fast and easy without damaging them!

- ▶ **Economic solution**, as it is only an accessory that increases the flexibility of your attachment.
- ▶ Robust design.
- ▶ Plastic compression rolls avoid damage of the material to be gripped.
- > Fast and easy mounting and removal on site.
- ▶ Low additional weight: only 28kg/61.6lbs in total.
- ▶ High load capacities:

for A02HPX/D02HPX: 350 kg / 770 lbs

for A04H/A04HPX and D04H/D04HPX: 600 kg / 1,320 lbs for A06H/A06HPX and D06H/D06HPX: 600 kg / 1,320 lbs for A09H/A09HPX and D09H/D09HPX: 900 kg / 1,980 lbs



KM 685 05-D-A









Careful gripping of plain, slippery surfaces







Precise gripping of

very narrow objects





The industrial grabs with the low maintenance *HPXdrive* for excavators up to 6t / 13,200lbs or 9t / 19,800lbs operating weight - for industrial re-handling tasks with reinforced shell geometry.

- HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston.
  No hydraulic cylinder required!
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- ➤ The perforated skin of the shells lets dust and fine gravel through without larger pieces blocking the shell filter system.
- ▶ Including the flat 15t-rotator with 360° endless rotation for precise positioning!
- Constant and high closing force (D06: 22 kN / 4,945 lbf at 26 MPa / 3,744 psi; D09: 17 kN / 3,822 lbf at 26 MPa / 3,744 psi) during the entire operation.
- ▶ Different applications possible thanks to easy **shell exchange system**.
- ▶ Robust due to the use of cutting edge material 500HB steel. Cutting edges usable both sides.





Abbruch- und Sortiergreifer D06HPX-R / D09HPX-R							
Туре	Width E	Opening A	Height C max.	Volume	Weight	Load capacity*	Operating weight
	(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	(kg/lbs)	(kg/lbs)	(t/lbs)
D06HPX-R-50	520 / 20.5	1,135 / 44.7	835 / 32.9	100 / 0.13	300 / 660	2,000 / 4,400	4 - 6 / 8,800 - 13,200
D09HPX-R-60	620 / 24.4	1,400 / 55.1	969 / 38.1	150 / 0.2	315 / 693	2,500 / 5,500	6 - 9 / 13,200 - 19,800
*) the load capacity inc	dicated depends or	n the characteristic	s of the load (sur	face, largeness e	tc.)		

Package consists of: demolition and sorting grab, KINSHOFER rotator, non-return valve, wear plates

#### KINSHOFER Rotator

Integrated in a single unit with HPXdrive, no more connecting hoses. Continuous rotation. Overload protection by pressure relief valves.

Тур	Upper dimension (hole/Ø-hole pattern)	Torque	Bending moment max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875

Accessories	
Туре	Description
KM 691 8t	adapter plate for specific solutions - up to 8t / 17,600lbs
KM 690 8t	adapter for rigid mounting - up to 8t / 17,600lbs
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting - up to 6t / 13,200 lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting - up to 12t / 26,400lbs
•	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26 MPa / 3,770 psi, incl. parts and mounting

#### Requirements of carrier machine

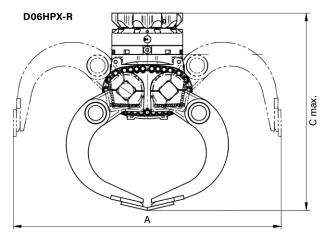
#### Operating pressure at pump capacity (open/close):

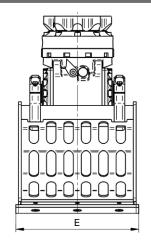
26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM

26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM

#### Operating pressure at pump capacity (rotate):

32 MPa (320 bar) at 20 - 50 l/min / 4,640 psi at 5.3 - 13 GPM







free extension of warranty kinshofer.com/service

**D12H-P** 

## Demolition and Sorting Grab with cylinder 8-12t / 17,600-26,400lbs

Robust multi purpose grabs for excavators from 8t / 17,600lbs to 12t / 26,400lbs operating weight. Well-suited for demolition and seperation of all kinds of building materials and waste.

- ▶ Including flat 15t rotator low height! Integrated non-return valve to avoid peak-pressures.
- ▶ High closing force (36kN/7,920lbf) thanks to two horizontal cylinders, completely protected by the shell carrier.
- The end position (grab open) is hydraulically cushioned to avoid damage to the cylinder when the grab is pushed into the material.
- The grab features a **perforated skin** to let fine dust and debris through without larger pieces getting caught. The durable, replaceable and indexable wear blades (500HB) enable the grabs to pinch with their edges without excessive wear.



<b>Demolition and Sortin</b>	g Grab D12H-P						
Туре	Width	Opening	Height	Height	Volume	Weight	Load capacity
	<b>E</b> (mm/in)	<b>A</b> (mm/in)	C max. (mm/in)	C min. (mm/in)	(liter/c.v.)	(kg/lbs)	(kg/lbs)
D12H-P-60	600 / 23.6	1,550 / 61	1,125 / 44.2	980 / 38.5	225 / 0.29	470 / 1,034	3,000 / 6,600

Package consists of: demolition and sorting grab, KINSHOFER rotator, non-return valve, wear plates

#### KINSHOFER Rotator

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

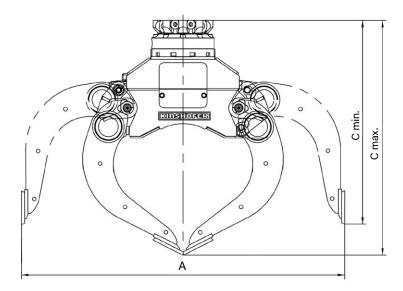
Туре	<b>Upper dimension</b> (hole/Ø-hole pattern)	Torque	Bending moment max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875

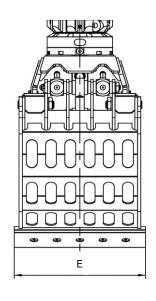
#### Accessories

Туре	Description
KM 690 15t	adapter for rigid mounting – up to 15t/33,000lbs
OQ45/4 rigid	bolt-on adapter for Oilquick OQ45 - 5t/11,000lbs to 12t/26,400lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t/26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 980-2 2t-8t c	solenoid valve for additional circuit, up to 26MPa/3,770psi, incl. parts and mounting

#### Requirements of carrier machine

Operating pressure (open/close):	max. 32 MPa (320 bar) / 4,640 psi
Recommended pump capacity (open/close):	75 - max. 150 l/min / 20 - max. 40 GPM
Hydraulic connection (open/close):	G 3/4" / G 1/2"
Operating pressure (rotate):	max. 20 MPa (200 bar) / max. 2,900psi
Recommended pump capacity (rotate):	max. 60 l/min / max. 16 GPM





# **Mounting Options for Hydraulic Attachments - rigid mount**

#### KM 690 - adapter for rigid mount



Туре	Operating weight (t/lbs)	
KM 690 2t	up to 2 / 4,400	
KM 690 8t	up to 8 / 17,600	
KM 690 15t	up to 15 / 33,000	

#### KM 691 – adapter for specific solutions

Type Operating weight (t/lbs)

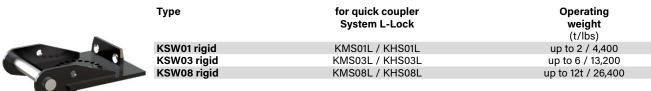
KM 691 2t up to 2 / 4,400

KM 691 8t up to 8 / 17,600



KSW rigid - bolt-on adapter for	quick coupler system L-Lock

S rigid - bolt-on adapter for quick coupler system S-Lock



_		4	
	-		

Туре	for quick coupler System S-Lock	Operating weight (t/lbs)
S40 rigid	KMS40S / KHS40S	up to 6 / 13,200
S45 rigid	KMS45S / KHS45S	up to 11 / 24,200
S50 rigid	KMS50S / KHS50S	up to 11 / 24,200

# **Mounting Options for Hydraulic Attachments - rigid mount**

#### OQ - bolt-on adapter for system "Oilquick" incl. hoses



Туре	For attachments	Operating weight (t/lbs)
OQ40/2 rigid	breakers	1 - 5 / 2,200 - 11,000
OQ40/4 rigid	grabs, shears	1 - 5 / 2,200 - 11,000
OQ45/2 rigid	breakers	5 - 12 / 11,000 - 26,400
OQ45/4 rigid	grabs, shears	5 - 12 / 11,000 - 26,400
OQ45-5/2 rigid	breakers	5 - 12 / 11,000 - 26,400
OQ45-5/3 rigid	compactors, planers	5 - 12 / 11,000 - 26,400
OQ45-5/4 rigid	grabs, shears	5 - 12 / 11,000 - 26,400
OQ60/2 rigid	breakers	8 - 15 / 17,600 - 33,000
OQ60/4 rigid	grabs, shears	8 - 15 / 17,600 - 33,000
OQ60-5/2 rigid	breakers	8 - 15 / 17,600 - 33,000
OQ60-5/3 rigid	compactors, planers	8 - 15 / 17,600 - 33,000
OQ60-5/4 rigid	grabs, shears	8 - 15 / 17,600 - 33,000

#### SW - bolt-on adapter for system "Liebherr"



Туре	Operating weight (t/lbs)
SW33 rigid	8 - 18 / 17,600 - 39,600
SW33 Likufix rigid*	8 - 18 / 17,600 - 39,600

\*incl. hoses

#### CW - bolt-on adapter for system "Verachtert"



Туре	Operating weight (t/lbs)
CW00 rigid	up to 1 / 2,200
CW05 rigid	up to 3.5 / 7,700
CW10 rigid	3.5 - 10.5 / 7,700 - 23,100
CW20 rigid	7.5 - 15 / 16,500 - 33,000
CW20S rigid**	7.5 - 15 / 16,500 - 33,000

\*\*smaller S-version

## Clamshell Bucket with cylinder 1-2t / 2,200-4,400lbs

Robust clamshell bucket in compact form for mini excavators from 1t / 2,200lbs to 2t / 4,400lbs operating weight.

- ▶ **Long life** is ensured due to the use of 500HB steel in the manufacture of cutting edges.
- Reduced wear resulting from generously dimensioned bearing system.
- ▶ Maximum loading height is achieved through the compact design.
- Excellent digging characteristics are the result of high closing forces.



Clamshell Bucke	et C02H						
Туре	Width	Opening	Height	Volume	Number	Weight	Load capacity
	E (mm/in)	<b>A</b> (mm/in)	C max. (mm/in)	(liter/c.y.)	of teeth	(kg/lbs)	(kg/lbs)
C02H-25	250 / 9.8	725 / 28.5	750 / 29.5	25 / 0.03	3	92 / 202	1,000 / 2,200
C02H-30	300 / 11.8	725 / 28.5	750 / 29.5	30 / 0.04	3	99 / 217	1,000 / 2,200
C02H-40	400 / 15.7	725 / 28.5	750 / 29.5	45 / 0.06	4	112 / 246	1,000 / 2,200

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, non-return valve and hose protection

#### KINSHOFER Rotator

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

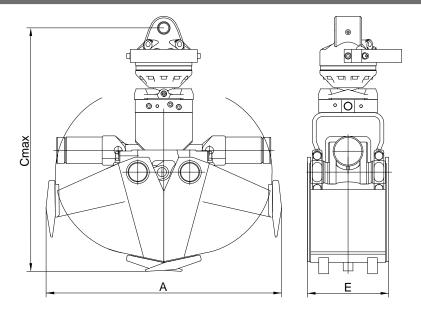
Туре	Upper dimension	Torque	Bending moment max.
	(width x pin-Ø) (mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 04 F	84 x 30 / 3.31 x 1.18	850 / 626	3,000 / 2,212

#### Accessories

Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW01 cardanic	adapter for system L-Lock KMS01L/KHS01L incl. cardan link excl. pendulum damper - up to 2t / 4,400lbs
KSW01 cardanic-P	adapter for system L-Lock KMS01L/KHS01L incl. cardan link incl. pendulum damper - up to 2t / 4,400lbs
	adapters for quick change systems from other manufacturers or different sizes available on request
KM 680 1t-4t	scraper

#### Requirements of carrier machine

Operating pressure (open/close): max. 20 MPa (200 bar) / 2,900 psi Recommended pump capacity (open/close): 10 - max. 40 l/min / 2.5 - max. 10.5 GPM Operating pressure (rotate): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (rotate): 15 - max. 50 l/min / 4 - max. 13 GPM



**C03H** 

## Clamshell Bucket with cylinder 2-3.5t / 4,400-7,700lbs

Robust clamshell bucket in compact form for mini and compact excavators from 2t / 4,400lbs to 3.5t / 7,700lbs operating weight.

- ▶ **Long life** is ensured due to the use of 500HB steel in the manufacture of cutting edges.
- Reduced wear resulting from generously dimensioned bearing system.
- ▶ Maximum loading height is achieved through the compact design.
- Excellent digging characteristics are the result of high closing forces.



Clamshell Buck	cet C03H						
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)
C03H-25	250 / 9.8	930 / 36.6	850 / 33.4	45 / 0.06	3	130 / 286	1,500 / 3,300
C03H-30	300 / 11.8	930 / 36.6	850 / 33.4	55 / 0.07	3	135 / 297	1,500 / 3,300
C03H-35	350 / 13.7	930 / 36.6	850 / 33.4	65 / 0.09	4	145 / 319	1,500 / 3,300
C03H-40	400 / 15.7	930 / 36.6	850 / 33.4	75 / 0.10	4	150 / 330	1,500 / 3,300
C03H-45	450 / 17.7	930 / 36.6	850 / 33.4	85 / 0.11	4	160 / 352	1,500 / 3,300
C03H-50	500 / 19.6	930 / 36.6	850 / 33.4	95 / 0.12	4	165 / 363	1,500 / 3,300

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, cylinder protection (from width 350mm / 13.7in), non-return valve and hose protection

#### KINSHOFER Rotator

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

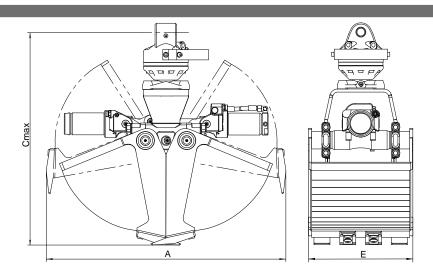
Туре	Upper dimension	Torque	Bending moment max.	
	(width x pin-Ø) (mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)	
KM 04 F	84 x 30 / 3.31 x 1.18	850 / 626	3,000 / 2,212	

### Accessories

Тур	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t / 13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper – up to 6t / 13,200lbs
	adapters for quick change systems from other manufacturers or different sizes available on request
KM 680 1t-4t	scraper

#### Requirements of carrier machine

Operating pressure (open/close): max. 26 MPa (260 bar) / 3,770 psi Recommended pump capacity (open/close): 25 - max. 75 l/min / 6.5 - max. 20 GPM Operating pressure (rotate): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (rotate): 15 - max. 50 I/min / 4 - max. 13 GPM



**C05H** 

Robust clamshell bucket in compact form for mini and compact excavators from 3t / 6,600lbs to 6t / 13,200lbs operating weight.

- ▶ **Long life** is ensured due to the use of 500 HB steel in the manufacture of cutting edges.
- Reduced wear resulting from generously dimensioned bearing system.
- ▶ Maximum loading height is achieved through the **compact design**.
- Excellent digging characteristics are the result of high closing forces (21 kN / 4,620 lbf at 26 MPa / 3,770 psi operating pressure; varies depending on width).
- ▶ Cylinder protection (from width 350 mm / 13.7 in).



Clamshell Bucket C05H							
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)
C05H-25	250 / 9.8	1,090 / 42.9	930 / 36.6	70 / 0.09	3	140 / 308	2,000 / 4,400
C05H-30	300 / 11.8	1,090 / 42.9	930 / 36.6	85 / 0.11	3	150 / 330	2,000 / 4,400
C05H-35	350 / 13.7	1,090 / 42.9	930 / 36.6	100 / 0.13	4	160 / 352	2,000 / 4,400
C05H-40	400 / 15.7	1,090 / 42.9	930 / 36.6	115 / 0.15	4	165 / 363	2,000 / 4,400
C05H-45	450 / 17.7	1,090 / 42.9	930 / 36.6	130 / 0.17	4	170 / 374	2,000 / 4,400
C05H-50	500 / 19.6	1,090 / 42.9	930 / 36.6	140 / 0.18	4	180 / 396	2,000 / 4,400
C05H-60	600 / 23.6	880 / 34.6	825 / 32.4	115 / 0.15	5	175 / 385	2,000 / 4,400

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, cylinder protection (from width 350mm / 13.7in), non-return valve and hose protection

#### KINSHOFER Rotator

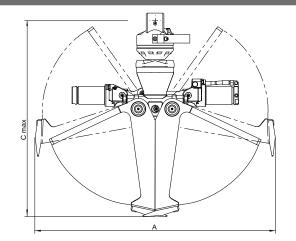
Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

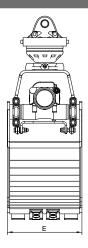
Туре	Upper connection	Torque	Bending moment	
	(width x pin-Ø)		max.	
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)	
KM 04 F	84 x 30 / 3.31 x 1.18	850 / 626	3,000 / 2,212	

Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t / 13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper – up to 6t / 13,200lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 680 5t-8t	scraper

#### Requirements of carrier machine

Operating pressure (open/close): max. 26 MPa (260 bar) / 3,770 psi Recommended pump capacity (open/close): 25 - max. 75 l/min / 6.5 - max. 20 GPM Operating pressure (rotate): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (rotate): 15 - max. 50 l/min / 4 - max. 13 GPM





**C08H** 

## Clamshell Bucket with cylinder 4-9t / 8800-19800lbs

Robust clamshell bucket for every day operation for excavators from 4t / 8,800lbs to 9t / 19,800lbs operating weight.

- ▶ Long life is ensured due to the use of 500 HB steel in the manufacture of cutting edges.
- ▶ **Reduced wear** resulting from generously dimensioned bearing system.
- ▶ Maximum loading height is achieved through the **compact design**.
- **Excellent digging characteristics** are the result of high closing forces (21 kN / 4,620 lbf at 26 MPa / 3,770 psi, 26 kN / 5,720 lbf at 32 MPa / 4,640 psi operating pressure; varies depending on width).



<b>Clamshell Bucl</b>	ket C08H						
Туре	Width E (mm/in)	Opening A (w/o teeth) (mm/in)	Height C max. (incl. teeth) (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)
C08H-32	325 / 12.7	1,260 / 49.6	1,060 / 41.7	115 / 0.15	3	240 / 528	3,000 / 6,600
C08H-40	400 / 15.7	1,260 / 49.6	1,060 / 41.7	145 / 0.19	3	260 / 572	3,000 / 6,600
C08H-50	500 / 19.6	1,260 / 49.6	1,060 / 41.7	185 / 0.24	5	280 / 616	3,000 / 6,600
C08H-60	600 / 23.6	1,260 / 49.6	1,060 / 41.7	220 / 0.29	5	295 / 649	3,000 / 6,600
C08H-80	800 / 31.4	1,260 / 49.6	1,060 / 41.7	300 / 0.39	9	330 / 726	3,000 / 6,600

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, non-return valve and hose protection

#### KINSHOFER Rotator

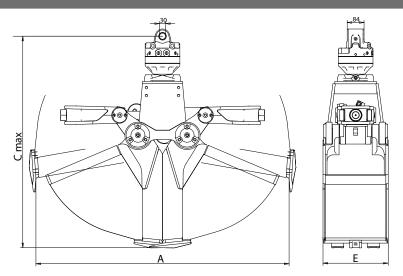
Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Upper dimension	Upper dimension Torque	
	(width x pin-Ø)		max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 04 F140-30US <i>E</i>	84 x 30 / 3.31 x 1.18	1,000 / 737	8,500 / 6,268

Туре	Description
1/84 504 41 01	
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t / 13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper – up to 6t / 13,200lbs
KSW08 cardanic	adapter for system L-Lock KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t / 26,400lbs
KSW08-1t-8t cardanic-P	adapter for system L-Lock KMS08L/KHS08L incl. cardan link incl. pendulum damper
	adapters for quick change systems from other manufacturers or different sizes on request
KM 680 5t-8t	scraper

#### Requirements of carrier machine

max. 32 MPa (320 bar) / 4,640 psi Operating pressure (open/close): Recommended pump capacity (open/close): 40 - max. 90 l/min / 10.5 - max. 24 GPM Operating pressure (rotate): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (rotate): 15 - max. 50 l/min / 4 - max. 13 GPM



C05HPX

Universal clamshell bucket with the HPXdrive for compact excavators from 3t/6,600lbs to 6t/13,200lbs operating weight - low maintenance.

▶ *HPXdrive* - the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required.

- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows due to the
- ▶ Constant closing forces during the entire digging process (25 kN / 5,500 lbf at an internal operating pressure of 26 MPa / 3,770 psi; varies depending on width).
- ▶ Different applications possible thanks to shell exchange system.
- ▶ **Long life** is ensured due to the use of 500 HB steel in the manufacture of cutting edges.



Clamshell Buck	et C05HPX						
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)
C05HPX-40	400 / 15.7	1,110 / 43.7	880 / 34.6	115 / 0.15	4	270 / 594	3,000 / 6,600
C05HPX-45	450 / 17.7	1,110 / 43.7	880 / 34.6	130 / 0.17	4	285 / 627	3,000 / 6,600
C05HPX-50	500 / 19.6	1,110 / 43.7	880 / 34.6	140 / 0.18	4	290 / 638	3,000 / 6,600
C05HPX-60	600 / 23.6	1,110 / 43.7	880 / 34.6	170 / 0.22	6	305 / 671	3,000 / 6,600
C05HPX-80	800 / 31.4	1,110 / 43.7	880 / 34.6	230 / 0.30	6	330 / 726	3,000 / 6,600

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, non-return valve and hose protection

Note: exchangeable shells on request

Integrated in a single unit with the HPXdrive, no more connecting hoses. Continous rotation. Overload protection ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment	
	(width x pin-Ø) (mm/in)	(Nm/ft.lbs)	max. (Nm/ft.lbs)	
KM 04 F140-30VE	84 x 30 / 3.31 x 1.18	850 / 626	3,000 / 2,212	

#### Accessories

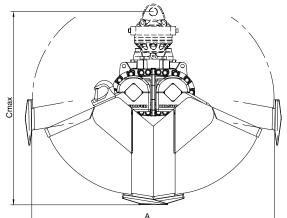
Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t / 13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper – up to 6t / 13,200lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 680 5t-8t	scraper
KM 685 06E hook set 2	welded hooks (2 pcs.)
KM 685 07E set	wear plates to protect cutting edges
KM 685 08 HPX 450E	digging extension for channel construction – 450mm / 17.7in (60kg / 132lbs)

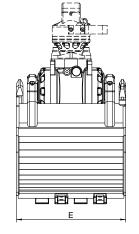
#### Requirements of carrier machine

Operating pressure at pump capacity (rotate): Operating pressure at pump capacity (open/close):

26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM 32 MPa (320 bar) at 15 - max. 50 l/min / 4,640 psi at 4 - max. 13 GPM 26 - 32 MPa (260 - 320 bar) at max. 40 l/min /

3,745 - 4,640 psi at max. 10.6 GPM







free extension of warranty kinshofer.com/service

## Clamshell Bucket with HPXdrive 6-9t / 13,200-19,800lbs

C08HPX

Universal clamshell bucket with the HPXdrive for compact excavators from 6t / 13,200lbs to 9t / 19,800lbs operating weight - low maintenance.

- > HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required.
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows due to the
- ▶ Constant closing forces during the entire digging process (22 kN / 4,840 lbf at an internal operating pressure of 26 MPa / 3,770 psi; varies depending on width).
- ▶ Different applications possible thanks to shell exchange system.
- ▶ Long life is ensured due to the use of 500 HB steel in the manufacture of cutting edges.



Clamshell Bucket C08HPX								
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)	
C08HPX-40	400 / 15.7	1,250 / 49.2	960 / 37.7	145 / 0.19	4	280/616	3,000 / 6,600	
C08HPX-45	450 / 17.7	1,250 / 49.2	960 / 37.7	160 / 0.21	4	295 / 649	3,000 / 6,600	
C08HPX-50	500 / 19.6	1,250 / 49.2	960 / 37.7	180 / 0.24	4	300 / 660	3,000 / 6,600	
C08HPX-60	600 / 23.6	1,250 / 49.2	960 / 37.7	220 / 0.29	6	320 / 704	3,000 / 6,600	
C08HPX-80	800 / 31.4	1,250 / 49.2	960 / 37.7	300 / 0.39	6	340 / 748	3,000 / 6,600	

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, non-return valve and hose protection

Note: exchangeable shells on request

Integrated in a single unit with the HPXdrive, no more connecting hoses. Continous rotation. Overload protection ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment	
	(width x pin-Ø) (mm/in)	(Nm/ft.lbs)	max. (Nm/ft.lbs)	
KM 04 F140-30USE	84 x 30 / 3.31 x 1.18	1,000 / 737	8,500 / 6,268	

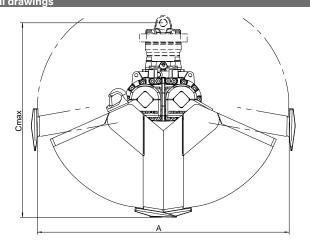
Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW08 cardanic	adapter for system L-Lock KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t / 26,400lbs
KSW08-1t-8t cardanic-P	adapter for system L-Lock KMS08L/KHS08L incl. cardan link incl. pendulum damper
	adapters for quick change systems from other manufacturers or different sizes on request
KM 680 5t-8t	scraper
KM 685 06E hook set 2	welded hooks (2 pcs.)
KM 685 07E set	wear plates to protect cutting edges
KM 685 08 HPX 450E	digging extension for channel construction - 450mm / 17.7in (60kg / 132lbs)

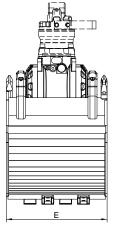
#### Requirements of carrier machine

Operating pressure at pump capacity (open/close): Operating pressure at pump capacity (rotate):

26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM 32 MPa (320 bar) at 15 - max. 50 l/min / 4,640 psi at 4 - max. 13 GPM

26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM







free extension of warranty kinshofer.com/service

**C08V** 

## Clamshell Bucket with vertical cylinder 4-9t / 8,800-19,800lbs

Clamshell bucket with vertical cylinder for earthwork and trenches for excavators from 4t/8,800lbs to 9t/19,800lbs operating weight - ideal for foundations and cable trenches.

- > Long life is ensured due to the use of 500 HB steel in the manufacture of cutting edges.
- Durable as the hydraulic cylinder is fully enclosed in a hub unit, short hydraulic connecting hoses.
- ▶ **Reduced wear** resulting from generously dimensioned bearing system.
- Excellent digging characteristics are the result of high closing forces (21kN/4,620lbf at an operating pressure of 26MPa/3,770psi, 26kN/5,720lbf at an operating pressure of 32MPa/4,640psi; varies depending on width).





Clamshell Bucket C08V								
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)	
C08V-32	325 / 12.7	1,260 / 49.6	1,290 / 50.7	115 / 0.15	3	305 / 671	3,000 / 6,600	
C08V-40	400 / 15.7	1,260 / 49.6	1,290 / 50.7	145 / 0.19	3	325 / 715	3,000 / 6,600	
C08V-50	500 / 19.6	1,260 / 49.6	1,290 / 50.7	185 / 0.24	5	345 / 759	3,000 / 6,600	
C08V-60	600 / 23.6	1,260 / 49.6	1,290 / 50.7	220 / 0.29	5	365 / 803	3,000 / 6,600	
C08V-80	800 / 31.4	1,260 / 49.6	1,290 / 50.7	300 / 0.39	9	400 / 880	3,000 / 6,600	

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, non-return valve and hose guard

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

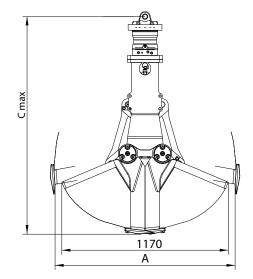
Туре	Upper dimension Torque		Bending moment
	(width x pin-Ø)		max.
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 04 F140-30US <i>E</i>	84 x 30 / 3.31 x 1.18	1,000 / 737	8,500 / 6,268

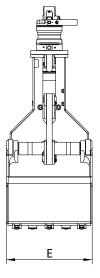
#### Accessories

Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-1,7600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t / 13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper - up to 6t / 13,200lbs
KSW08 cardanic	adapter for system L-Lock KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t / 26,400lbs
KSW08-1t-8t cardanic-P	adapter for system L-Lock KMS08L/KHS08L incl. cardan link incl. pendulum damper
	adapters for quick change systems from other manufacturers or different sizes available on request
KM 680 5t-8t	scraper

#### Requirements of carrier machine

Operating pressure (open/close): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (open/close): 40 - max. 90 l/min / 10.5 - max. 24 GPM Operating pressure (rotate): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (rotate): 15 - max. 50 l/min / 4 - max. 13 GPM





C-VE

exchange support. down. Mount the

## **KINSHOFER** Shell Exchange System

Robust grabs for excavators with revolutionary exchange system in a single device. As a new demand on site arises, the attachment can be exchanged and the new application can commence. Easy remounting of shells for excavating, landscaping, laying pipes, logging, rail track handling etc.

- ▶ **Efficiency:** only the shells are replaced; exchange is possible with only one person
- Fastness: easy exchange of the lynch pin from the change-over system within 4 minutes, no hydraulic work necessary
- ▶ **Robust technics:** compact design through the integrated rotator. Robust shell bearing with coexisting change mechanism



#### Clamshell buckets with exchangeable shells are available for

















Insert the change-over pin and fasten the lynch pin.

Position the bucket carrier over the new attachment and close the locking unit hydraulically.

Remove the exchange support. Ready for use!

C08VE

## Clamshell Bucket with exchangeable shells 4-9t / 8,800-19,800lbs

Clamshell Bucket with exchangeable shells and vertical cylinder for excavators from 4t / 8,800lbs to 9t / 19,800lbs operating weight - through quick and easy exchange of shells ideal for different applications, for excavation operations, landscaping, trench digging, handling of logs etc.

The shells can be changed in less than four minutes.

- ▶ **Economic solution** as only the shells have to be exchanged for another application - bucket carrier, hydraulic cylinder and bearings are integrated into the unit.
- > Long life is ensured due to the use of 500 HB steel in the manufacture of cutting edges.
- Reduced wear resulting from generously dimensioned bearing system.
- Excellent digging characteristics are the result of high closing forces (26 kN / 5,720 lbf at an operating pressure of 32 MPa / 4,640 psi; varies depending on width).



Clamshell Buc	ket C08VE							
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Height C min. (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Capacity (kg/lbs)
C08VE-32	325 / 12.7	1,330 / 52.3	1,520 / 59.8	1,380 / 54.3	115 / 0.15	3	330 / 726	3,000 / 6,600
C08VE-40	400 / 15.7	1,330 / 52.3	1,520 / 59.8	1,380 / 54.3	145 / 0.19	3	335 / 737	3,000 / 6,600
C08VE-50	500 / 19.6	1,330 / 52.3	1,520 / 59.8	1,380 / 54.3	185 / 0.24	5	345 / 759	3,000 / 6,600
C08VE-60	600 / 23.6	1,330 / 52.3	1,520 / 59.8	1,380 / 54.3	220 / 0.29	5	355 / 781	3,000 / 6,600
C08VE-80	800 / 31.4	1,330 / 52.3	1,520 / 59.8	1,380 / 54.3	300 / 0.39	9	390 / 858	3,000 / 6,600

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator with hose guard, shell exchange aid kit and non-return valve

Exchangeable Shells C0	8VE-S				
Туре	Width E (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)
C08VE-32S	325 / 12.7	115 / 0.15	3	130 / 286	3,000 / 6,600
C08VE-40S	400 / 15.7	145 / 0.19	3	135 / 297	3,000 / 6,600
C08VE-50S	500 / 19.6	185 / 0.24	5	145 / 319	3,000 / 6,600
C08VE-60S	600 / 23.6	220 / 0.29	5	155 / 341	3,000 / 6,600
C08VE-80S	800 / 31.4	300 / 0.39	9	190 / 418	3,000 / 6,600
Note: special shells on re-	quest				

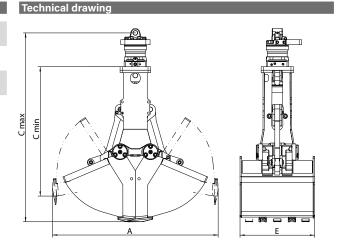
#### KINSHOFER Rotator

Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment max.		
	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)		
KM 04 F140-30US <i>E</i>	84 x 30 / 3.31 x 1.18	1,000 / 737	8,500 / 6,268		

Accessories	
Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t / 2,200-17,600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t / 13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper – up to 6t / 13,200lbs
KSW08 cardanic	adapter for system L-Lock KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t / 26,400lbs
KSW08-1t-8t cardanic-P	adapter for system L-Lock KMS08L/KHS08L incl. cardan link incl. pendulum damper
	adapters for quick change systems from other manufacturers or different sizes on request
KM 680 5t-8t	scraper

Requirements of carrier machine	Requirements of carrier machine					
Operating pressure (open/close):	max. 32 MPa (320 bar) / 4,640 psi					
Recommended pump capacity (open/close):	40 - max. 90 l/min / 10.5 - max. 24 GPM					
Operating pressure (rotate):	max. 32 MPa (320 bar) / 4,640 psi					
Recommended pump capacity (rotate):	15 - max. 50 l/min / 4 - max. 13 GPM					



**C10H** 

## Clamshell Bucket with horizontal cylinder 6-10t / 13,200-22,000lbs

Robust clamshell bucket for excavators up to 10t / 22,000lbs operating weight.

- ▶ Long life is ensured due to the use of 500 HB steel in the manufacture of cutting edges.
- ▶ **Reduced wear** resulting from generously dimensioned bearing system.
- ▶ **Maximum loading height** is achieved through the compact design.
- Excellent digging characteristics are the result of high closing forces (37 kN / 8,140 lbf at an operating pressure of 32 MPa / 4,640 psi; varies depending on width).



Clamshell Bucket C10H							
Туре	Width E (mm/in)	Opening A (w/o teeth) (mm/in)	Height C max. (incl. teeth)(mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Capacity (kg/lbs)
C10H-40	400 / 15.7	1,425 / 56.1	1,150 / 45.2	170 / 0.22	3	285 / 627	3,000 / 6,600
C10H-50	500 / 19.6	1,425 / 56.1	1,150 / 45.2	220 / 0.29	5	305 / 671	3,000 / 6,600
C10H-65	650 / 25.5	1,425 / 56.1	1,150 / 45.2	290 / 0.38	5	320 / 704	3,000 / 6,600
C10H-80	800 / 31.4	1,425 / 56.1	1,150 / 45.2	355 / 0.46	9	345 / 759	3,000 / 6,600
C10H-100	1,000 / 39.3	1,425 / 56.1	1,150 / 45.2	450 / 0.59	9	375 / 825	3,000 / 6,600
C10H-120	1,200 / 47.2	1,425 / 56.1	1,150 / 45.2	540 / 0.71	9	400 / 880	3,000 / 6,600

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator, non-return valve and hose guard

#### KINSHOFER Rotator

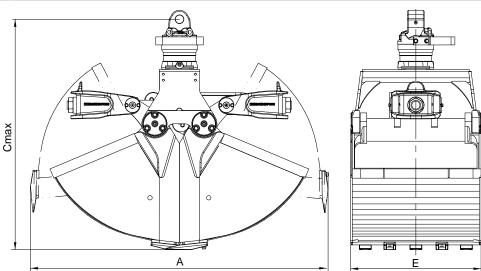
Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment
	(width x pin-Ø) (mm/in)	(Nm/ft.lbs)	max. (Nm/ft.lbs)
KM 06 F140-40	84 x 40 / 3.31 x 1.57	1,000 / 737	8,500 / 6,268

туре	Description
KM 501 6t-12t	upper suspension without pendulum damper
KM 511 6t-12t	upper suspension with pendulum damper
KM 510 6t-12t	single pendulum damper to upgrade the upper suspension KM 501 6t-12t / 13,200-26,400lbs
KSW08 cardanic	adapter for system L-Lock KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t / 26,400lbs
	adapters for quick change systems from other manufacturers or different sizes available on request
KM 680 9t-12t	scraper
	·

#### Requirements of carrier machine

Operating pressure (open/close): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (open/close): 40 - max. 120 l/min / 10.5 - max. 32 GPM max. 32 MPa (320 bar) / 4,640 psi Operating pressure (rotate): Recommended pump capacity (rotate): 15 - max. 50 l/min / 4 - max. 13 GPM



exchange support. down. Mount the

## **KINSHOFER** Shell Exchange System

Robust grabs for excavators with revolutionary exchange system in a single device. As a new demand on site arises, the attachment can be exchanged and the new application can commence. Easy remounting of shells for excavating, landscaping, laying pipes, logging, rail track handling etc.

- ▶ **Efficiency:** only the shells are replaced; exchange is possible with only one person
- Fastness: easy exchange of the lynch pin from the change-over system within 4 minutes, no hydraulic work necessary
- ▶ **Robust technics:** compact design through the integrated rotator. Robust shell bearing with coexisting change mechanism



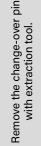
#### Clamshell buckets with exchangeable shells are available for











Position the bucket carrier over the new attachment and close the locking unit hydraulically.

Remove the lynch pin from the change-over system.







Insert the change-over pin and fasten the lynch pin.

Remove the exchange support. Ready for use!

C<sub>12</sub>VE

## Clamshell Bucket with exchangeable shells 9-12t / 19,800-26,400lbs

Clamshell Bucket with exchangeable shells and vertical cylinders for excavators from 9t / 19,800lbs to 12t / 26,400lbs operating weight - through quick and easy exchange of shells, the C12VE is ideal for different applications, for excavation operations, landscaping, trench digging, handling of logs and more. The shells can be changed in less than four minutes.

- ▶ **Economic solution** as only the shells have to be exchanged for another application - bucket carrier, hydraulic cylinder and bearings are integrated
- ▶ **Long life** is ensured due to the use of 500 HB steel in the manufacture of cutting edges.
- ▶ Reduced wear resulting from generously dimensioned bearing system.
- **Excellent digging characteristics** are the result of high closing forces (39 kN / 8,580 lbf at 32 MPa / 4,640 psi operating pressure; varies depending on width).



Clamshell Buck	et C12VE							
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max.(mm/in)	Length F (mm/in)	Volume (liter/c.y.)	Number of teeth	Weight (kg/lbs)	Load capacity (kg/lbs)
C12VE-32	325 / 12.7	1,645 / 64.7	1,570 / 61.8	1,350 / 53.1	125 / 0.16	3	475 / 1,045	4,500 / 9,900
C12VE-40	400 / 74.1	1,645 / 64.7	1,570 / 61.8	1,350 / 53.1	160 / 0.21	3	485 / 1,067	4,500 / 9,900
C12VE-50	500 / 19.6	1,645 / 64.7	1,570 / 61.8	1,350 / 53.1	200 / 0.26	5	500 / 1,100	4,500 / 9,900
C12VE-60	600 / 23.6	1,645 / 64.7	1,570 / 61.8	1,350 / 53.1	245 / 0.32	5	515 / 1,133	4,500 / 9,900
C12VE-70	700 / 27.5	1,645 / 64.7	1,570 / 61.8	1,350 / 53.1	285 / 0.37	7	525 / 1,155	4,500 / 9,900
C12VE-80	800 / 31.4	1,645 / 64.7	1,570 / 61.8	1,350 / 53.1	330 / 0.43	9	535 / 1,177	4,500 / 9,900

Package consists of: clamshell bucket, bolt-on teeth, KINSHOFER rotator with hose guard, 2 weld-on eyes, shell exchange aid kit and non-return valve

#### KINSHOFER Rotator

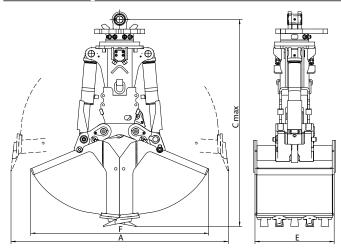
Continuous rotation and two oil passages. Overload protection is ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment max.
	(width x pin-Ø) (mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
KM 10 F275-50	110 x 50 / 4.33 x 1.97	2,000 / 1,475	14,000 / 10,325

Туре	Description
KM 501 9t-12t	upper suspension without pendulum damper
KM 511 9t-12t	upper suspension with pendulum damper
KM 510 9t-12t	single pendulum damper to upgrade the upper suspension KM 501 9t-12t / 19,800-26,400lbs
KSW08 cardanic	adapter for system L-Locks KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t / 26,400lbs
KSW08-9t-12t cardanic-P	adapter for system L-Locks KMS08L/KHS08L incl. cardan link incl. pendulum damper
KSW10 cardanic	adapter for system L-Lock KMS10L/KHS10L incl. cardan link excl. pendulum damper – up to 19t / 41,800lbs
KSW10 cardanic-P	adapter for system L-Lock KMS10L/KHS10L incl. cardan link incl. pendulum damper – up to 19t / 41,800lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 680 C12VE	scraper

#### Requirements of carrier machine

Operating pressure (open/close): max. 32 MPa (320 bar) / 4,640 psi Recommended pump capacity (open/close): 40 - max. 120 l/min / 10.5 - max. 32 GPM max. 32 MPa (320 bar) / 4,640 psi Operating pressure (rotate): Recommended pump capacity (rotate): 20 - max. 50 l/min / 5 - max. 13 GPM



# **Exchangeable Shells for C12VE**

Acriangeable 31	nells for C12VE								
hells are intercha	angeable and availab	le in all widtl	ns. Rapid exch	ange with she	ll stand and	oin exchang	je tool.		
	Туре	Width	Opening	Height complete	Volume	Number of teeth	Weight shells	Loading capacity	Closing force
		(mm/in)	(mm/in)	(mm/in)	(liter/c.y.)	01 100111	(kg/lbs)	(kg/lbs)	(kN/lbf
lamshell Bucke	t								
	C12VE-32S	325 / 12.7	1,535 / 60.4	1,570 / 61.8	125 / 0.16	3	130 / 286	4,500 / 9,900	
	C12VE-40S C12VE-50S	400 / 15.7 500 / 19.6	1,535 / 60.4 1,535 / 60.4	1,570 / 61.8 1,570 / 61.8	160 / 0.21 200 / 0.26	3 5		4,500 / 9,900 4,500 / 9,900	
	C12VE-60S	600 / 23.6	1,535 / 60.4	1,570 / 61.8	245 / 0.32	5		4,500 / 9,900	
	C12VE-70S	700 / 27.5	1,535 / 60.4	1,570 / 61.8	285 / 0.37	7	205 / 451	4,500 / 9,900	
	C12VE-80S	800 / 31.4	1,535 / 60.4	1,570 / 61.8	330 / 0.43	9	225 / 495	4,500 / 9,900	39 / 8,5
cavating Grab									
	<b>P</b>								
T	C12VE-32S EG C12VE-40S EG	325 / 12.7 400 / 15.7	1,200 / 47.2 1,100 / 43.3	1,350 / 53.1 1,355 / 53.3	90 55	3	110 / 242 125 / 275	4,500 / 9,900 4,500 / 9,900	
	C12VE-403 EG	800 / 31.4	800 / 31.4	1,350 / 53.3	100	9	155 / 341	4,500 / 9,900	
e Grab									
			Ø75 560 /						
	C12VE-80S PG	800 / 31.4	Ø75-560 / Ø2.9-22	1,590 / 62.5	-	-	145 / 319	4,500 / 9,900	39 / 8,5
Il Shaft Grab									
	<b>S</b>								
	C12VF 1005 W6C	Ø1,000 /	1000 / 20 2	1220 / 510	100 / 012	E	140 / 200	4 500 / 0 000	60 / 10 0
	C12VE-100S WSG  Note: larger shells ava	Ø39.3	1,000 / 39.3	1,320 / 51.9	100 / 0.13	5	140 / 308	4,500 / 9,900	00 / 13,2
	_	nable on requ							
y and Forestry	/ Grab								
	A12VE-94S	940 / 37	1,850 / 72.8	1,695 / 66.7	400 / 0.52	-	205 / 451	4,500 / 9,900	39 / 8,5
	A12VE-122S	1,220 / 48	1,850 / 72.8	1,695 / 66.7	600 / 0.78	-	240 / 528	4,500 / 9,900	39 / 8,5
ck Grab									
761 log									
	R12VE-48S	480 / 18.8	1,850 / 72.8	1,790 / 70.4	0,50 m² /		200 / 440	4,500 / 9,900	30 / 6,6
	R12VE-48S	480 / 18.8	1,850 / 72.8	1,790 / 70.4	0,50 m <sup>2</sup> / 33.5 cord		200 / 440	4,500 / 9,900	30 / 6,6
nber Grab	R12VE-48S	480 / 18.8	1,850 / 72.8	1,790 / 70.4			200 / 440	4,500 / 9,900	30 / 6,6
nber Grab	R12VE-48S	480 / 18.8	1,850 / 72.8	1,790 / 70.4			200 / 440	4,500 / 9,900	30 / 6,6
nber Grab	R12VE-48S	480 / 18.8	1,850 / 72.8	1,790 / 70.4			200 / 440	4,500 / 9,900	30 / 6,6
nber Grab	R12VE-48S	480 / 18.8 470 / 18.5			33.5 cord 0,50 m <sup>2</sup> /				
			1,850 / 72.8	1,790 / 70.4	33.5 cord			4,500 / 9,900 4,500 / 9,900	
					33.5 cord 0,50 m <sup>2</sup> /				
nber Grab  il Tines					33.5 cord 0,50 m <sup>2</sup> /				
					33.5 cord 0,50 m <sup>2</sup> /				
					33.5 cord 0,50 m <sup>2</sup> /		180 / 396		30 / 6,6

59

## **Additional and Small Parts**

#### Accessories



Туре	Description
1 y p c	Description

KM 685 05-D02-A02	4-Grip for D02HPX/A02HPX grabs (load capacity max. 350kg/770lbs). Specify grab type when ordering
KM 685 05-D04-A04	4-Grip for D04/A04 grabs (load capacity max. 600kg/1,320lbs). Specify grab type when ordering
KM 685 05-D06/09-A06/09	4-Grip for D06/A06 (load capacity max. 600kg/1,320lbs) and D09/A09 grabs (load capacity max. 900kg/1,980lbs). Specify grab type when ordering



KM 685 05E*	adapter for compression rais for C-grabs (load capacity max. 250kg/550lbs). Specify grab type when ordering
KM 381 09 (720)	compression rails, 720mm / 28.3in length
KM 381 09 (1000)	compression rails, 1,000mm / 39.3in length



KM 680 1t-4t*	scraper
KM 680 5t-8t*	scraper
KM 680 9t-12t*	scraper
KM 680 C12/18VE*	scraper

<sup>\*</sup> specify width of grab when ordering



KM 685 06E hook	welded hook	

KM 685 06E hook set 2 welded hooks, set with 2 pieces



KM 685 07E set	wear plate set to protect cutting edges	
----------------	---	--

KM 685 08 HPX-450E	digging extension for general construction length: 450mm / 17.7in; weight: 60kg / 132lbs	
--------------------	---	--

KM 980-2 2t-8t c solenoid valve for additional oil circuit, up to 26MPa / 3,770psi, incl. parts and mounting



KM 685 09E-A02-A09 bolt-on side plates for A04 to A09-grabs. Specify grab type when ordering

## 3-Finger Timber Grab with HPXdrive

### T06HPX-3Z / T09HPX-3Z

With the 3-finger timber grab for logging and forestry tasks with the low maintenance *HPXdrive* for excavators with up to 6t / 13,200lbs or 9t / 19,800lbs operating weight, even logs with only 90mm/3.5in diameter can be gripped firmly. Ideal also for the handling of brushwood and branches.

- HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required!
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- ▶ **Constant closing force** during the entire operation.
- Different applications possible thanks to easy shell exchange system.
- ▶ Rigid mounting and flat 360° rotator for precise positioning.
- ▶ Arms made of cutting edge material 500HB.



Timber Grab T06HPX/T09HPX								
Туре	Width E (mm/in)	Opening A (mm/in)	Height C max. (mm/in)	Gripping range D min D max. (Ø mm/in)	Weight (kg/lbs)	Load capacity (kg/lbs)	Closing force (kN/lbf)	Operating weight (t/lbs)
T06HPX-3Z	378 / 14.9	1,240 / 48.8	1,050 / 41.3	90 / 3.5 - 560 / 22	310 / 682	1,000 / 2,200	17 / 3,740	3-6 / 6,600-13,200
T09HPX-3Z	375 / 14.7	1,240 / 48.8	1,035 / 40.7	90 / 3.5 - 560 / 22	320 / 704	2,000 / 4,400	17 / 3,740	5-9 / 11,000-19,800

Package consists of: timber grab, KINSHOFER rotator (T06HPX: KM 10 F214/180 / T09HPX: KM 15 F273/273) and non-return valve

#### KINSHOFER Rotator

Integrated in a single unit with the **HPXdrive**, no more connecting hoses. Continous rotation. Overload protection ensured by pressure relief valves.

Туре	Upper dimension	Torque	Bending moment max.
	(hole/Ø-hole pattern) (mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)
T06HPX: KM 10 F214/180	6 x M16; Ø 180 / 7.0	1,000 / 737	12,000 / 8,850
T09HPX: KM 15 F273/273	10 x M16; Ø 273 / 10.7	2,000 / 1,475	50,000 / 36,875

#### Accessories Description Type KM 6918t adapter plate for specific solutions - up to 8t/17,600lbs KM 690 8t adapter for rigid mounting - up to 8t/17,600lbs OQ45/4 rigid bolt-on adapter for Oilquick OQ45 - up to 12t/26,400lbs KSW03 rigid bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting - up to 6t/13,200lbs KSW08 rigid bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting - up to 12t/26,400lbs adapters for quick change systems from other manufacturers or different sizes on request KM 980-2 2t-8t c solenoid valve for additional circuit, up to 26MPa/3,770psi, incl. parts and mounting

T09HPX-3Z

#### Requirements of carrier machine

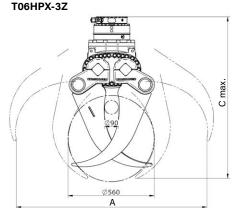
### Operating pressure at pump capacity (open/close):

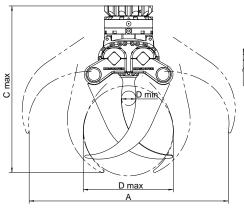
26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM

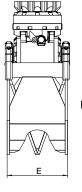
26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM

#### Operating pressure at pump capacity (rotate):

32 MPa (320 bar) at 20 - 50 l/min / 4,640 psi at 5.3 - 13 GPM









free extension of warranty kinshofer.com/service

## Timber Grab with cylinder 8-12t / 17,600-26,400lbs

The robust 4-finger timber grab unifies the proven KINSHOFER rotator with sturdy logging times for excavators with up to 12t / 26,400lbs operating weight. Ideal also for forestry enterprises handling windfalls or when realizing special demolition or pile foundation tasks.

- ▶ The kinematics of the tines avoid the unintended clamping of material.
- ▶ Logs with 110mm / 4.3in to 590mm / 23.2in in diameter can be gripped.
- Robust, fully integrated rotation with two motors. Integrated pressure relief valve against overcharge.
- ▶ High closing force achieved by two hydraulic cylinders. Robust bearings are made for high forces.



<b>Timber Grab</b>	T12H							
Туре	Width E	Opening A	Height C min.	Log-Ø	Volume	Weight	Load capacity	Closing force
	(mm/in)	(mm/in)	(mm/in)	(mm/in)	(m²/cord)	(kg/lbs)	(kg/lbs)	(kN/lbf)
T12H-60	600 / 23.6	1,850 / 72.8	1,135 / 44.6	110-590 / 4.3-23.2	0.40 / 0.27	610 / 1,342	3,000 / 6,600	16 / 3,520

Package consists of: timber grab, KINSHOFER rotation and non-return valve

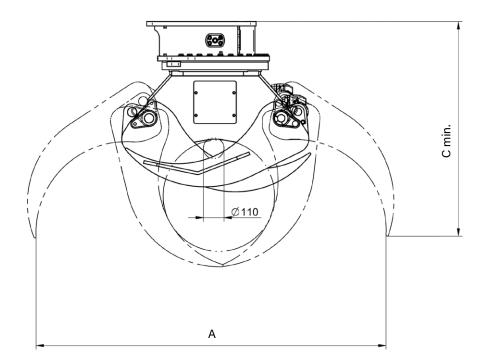
Accessories	
Туре	Description
KM 690 15t	adapter for rigid mounting - up to 15t/33,000lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t/26,400lbs
OQ45/4 rigid	bolt-on adapter for OilQuick OQ45 – up to 12t/26,400lbs
•	adapters for quick change systems from other manufacturers or different sizes on request

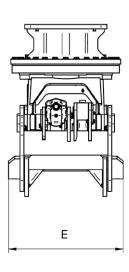
#### Requirements of carrier machine

Operating pressure (open/close): max. 28 MPa (280 bar) / 4,060 psi

Operating pressure (rotate): 14 - 25 MPa (140 - 250 bar) / 2,030 - 3,620 psi

Recommended pump capacity (rotate): 25 - 75 l/min / 6.5 - 20 GPM





KTC08

## Tree Shear up to 8t / 17,600lbs

The robust tree shear is ideal for cutting trees or shortening bushes and are ideal for excavators with up to 8t / 17,600lbs operating weight.

The optional gripper has been designed to cut more material with one cut in light wood by bundling e.g. thin bushes.

- ▶ Low self-weight.
- ▶ Robust design (cutting knives made of 500HB steel).
- **▶** High cutting performance.
- ▶ **Low wear** due to the use of high quality fine-grained steel.
- > Transporting eye close to centre of gravity for loading included.
- > Optional KTC08 Gripper: can be installed or removed quickly and easily. Collecting finger is opened at closed main arm/cutting arm, it is then sliding along the already gripped wood thanks to its spring-loaded flap/arm; afterwards it pops back completely due to the used spring. The already cut wood can now be secured by closing the collecting finger and the main arm can be opened for the next cut.



Tree Shear KTC	08						
Туре	Operating weight	Height max.	Width open - close	Cutting force max. @25 MPa / 3,620psi	Diameter softwood	Diameter hardwood	Weight
	(t/lbs)	(mm/in)	(mm/in)	(kN/lbf)	(mm/in)	(mm/in)	(kg/lbs)
KTC08	< 8 / 17,600	460 / 18.1	860-920 / 33.8-36.2	163 / 35,860	270 / 10.6	210 / 8.2	225 / 495

#### Package consists of: tree shear

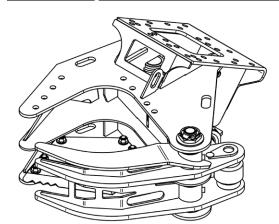
<b>Gripper for KTC08</b>						
Туре	Height max.	Width open - close	Clamp force max. @25 MPa / 3,620psi	Diameter softwood	Diameter hardwood	Weight
	(mm/in)	(mm/in)	(kN/lbf)	(mm/in)	(mm/in)	(kg/lbs)
KTC08 Gripper	215 / 8.4	770-665 / 30.3-26.1	8.5 / 1,870	< 20 / 0.7	150 / 5.9	78 / 171.6

#### Package consists of: gripper for KTC08

Accessories	
Туре	Description
KM 690 8t	adentar for rigid mounting, up to 01/17600lba
	adapter for rigid mounting – up to 8t/17,600lbs
KM 691 8t	adapter plate for specific solutions – up to 8t/17,600lbs
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t/13,200lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t/26,400lbs
OQ45/4 rigid	bolt-on adapter for Oilquick OQ45 – up to 12t/26,400lbs
-	adapters for quick change systems from other manufacturers or different sizes on request

#### Requirements of carrier machine

Operating pressure max. (open/close):	250 bar / 3,620 psi
Oil flow (open/close):	40 - 80 l/min / 10.5 - 21 GPM
Cycle times:	open: 1.3 sec. / close: 1.8 sec.







KTC08 with gripper module

## Universal Mulcher 1-15t / 2,200-33,000lbs

**KUM** 

The universal mulcher KUM is an excavator mulcher ideal for the maintenance of green spaces and the management of public greenery: cleaning undergrowth and roadsides.

The universal mulcher is available for excavators with an operating weight of up to 15t / 33,000 lbs.

- ▷ Reinforced body and double bottom for extremely high shock and torsion resistance.
- ▶ Valve group integrated as standard optimizes the performance of the engine, protects against pressure peaks and extends its service life.
- ▶ Height-adjustable support roller and sliding coupling for high functionality and work adapted to the situation.
- Shaft equipped with blades is suitable for mowing grass and low vegetation; the configuration with flails is ideal for demanding jobs such as cutting scrub and brush with branches up to 100mm / 3.94in in diameter.
- ▶ Gear motor with reinforced seal.



Universal Mulc	ther KUM						
Туре	Mulch width (mm/in)	Total width (mm/in)	Height w/o adapter (mm/in)	Depth (mm/in)	Weight w/o adapter (kg/lbs)	Ø-Clippings max. (mm/in)	Operating weight (t/lbs)
KUM0-50	500 / 19.7	715 / 28.1	417 / 16.4	516 / 20.3	70 / 154	15 - 20 / 0.59 - 0.79	1 - 2 / 2,200 - 4,400
KUM0-70	700 / 27.6	915 / 36.0	417 / 16.4	516 / 20.3	83 / 183	15 - 20 / 0.59 - 0.79	1 - 2 / 2,200 - 4,400
KUM1-60	600 / 23.6	800 / 31.5	461 / 18.1	640 / 25.2	100 / 220	20 - 30 / 0.79 - 1.18	1.5 - 4.5 / 3,300 - 9,900
KUM1-80	800 / 31.5	1,000 / 39.4	461 / 18.1	640 / 25.2	115 / 253	20 - 30 / 0.79 - 1.18	1.5 - 4.5 / 3,300 - 9,900
KUM1-100	1,000 / 39.4	1,200 / 47.2	461 / 18.1	640 / 25.2	125 / 275	20 - 30 / 0.79 - 1.18	1.5 - 4.5 / 3,300 - 9,900
KUM2-80	800 / 31.5	980 / 38.6	530 / 20.9	810 / 31.9	245 / 539	40 - 60 / 1.57 - 2.36	4 - 9 / 8,800 - 19,800
KUM2-100	1,000 / 39.4	1,180 / 46.5	530 / 20.9	810 / 31.9	270 / 594	40 - 60 / 1.57 - 2.36	4 - 9 / 8,800 - 19,800
KUM2-120	1,200 / 47.2	1,380 / 54.3	530 / 20.9	810 / 31.9	300 / 660	40 - 60 / 1.57 - 2.36	4 - 9 / 8,800 - 19,800
KUM3-110	1,100 / 43.3	1,280 / 50.4	575 / 22.6	830 / 32.7	375 / 825	60 - 80 / 2.36 - 3.15	7.5 - 12 / 16,500 - 26,400
KUM3-130	1,300 / 51.2	1,480 / 58.3	575 / 22.6	830 / 32.7	412 / 906	60 - 80 / 2.36 - 3.15	7.5 - 12 / 16,500 - 26,400
KUM4-110	1,100 / 43.3	1,300 / 51.2	620 / 24.4	855 / 33.7	455 / 1,001	80 - 100 / 3.15 - 3.94	10 - 15 / 22,000 - 33,000
KUM4-130	1,300 / 51.2	1,600 / 63.0	620 / 24.4	855 / 33.7	505 / 1,111	80 - 100 / 3.15 - 3.94	10 - 15 / 22,000 - 33,000
KUM4-150	1,500 / 59.1	1,800 / 70.9	620 / 24.4	855 / 33.7	540 / 1,188	80 - 100 / 3.15 - 3.94	10 - 15 / 22,000 - 33,000

Package consists of: universal mulcher

Requirements of carrier machine					
	KUM0	KUM1	KUM2	KUM3	KUM4
Operating pressure max.:	25 MPa (250 bar) / 3,600 psi	25 MPa (250 bar) / 3,600 psi	25 MPa (250 bar) / 3,600 psi	28 MPa (280 bar) / 4,032 psi	28 MPa (280 bar) / 4,032 psi
Recommended pump capacity min max.:	14 I/min / 3.7 GPM up to max. depending on engine displacement		, , , , , , ,		65 - 150 l/min / 17.2 - 39.6 GPM

ATTENTION: Piston motor necessary for carriers with very high oil pressure!

## Forestry Mulcher 10-15t / 22,000-33,000lbs

KFM5

High performance and maximum robustness for a device that has to withstand high loads. This forestry mulcher is designed for the toughest jobs in forestry, deep cleaning of forests of all sizes.

The KFM5 is suitable for excavators with an operating weight of 10t to 15t / 22,000 - 33,000lbs.

- ▶ Can be equipped with **two different mulching drums** as required:
  - R2: for heavy work and especially for crushing plants
  - R3: for cutting brushwood to chopping trees
- ▶ **Optimum use of rotor performance**, e.g. to efficiently clear large trunks, through mechanically opening front and rear flaps (optionally hydraulic).
- > The hydraulics and hydraulic motor are cooled with forced ventilation driven directly by the rotor, which keeps the oil temperature constant.
- The **reinforced housing with double bottom** protects the mulcher from impact and warping. Skids in HB400.
- ▶ **Piston engine with variable displacement** for carriers with very high oil pressure.



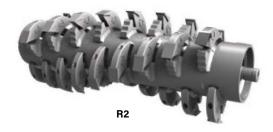
<b>Forestry Mulche</b>	r KFM5						
Туре	Mulch width (mm/in)	Total width (mm/in)	<b>Height</b> w/o adapter (mm/in)	Depth (mm/in)	<b>Weight</b> w/o adapter (kg/lbs)	Ø-Clippings max. (mm/in)	Displacement engine (cc)
KFM5-100-R2	1,015 / 40.0	1,300 / 51.2	740 / 29.1	720 / 28.3	535 / 1,177	220 / 8.66	23 - 46
KFM5-100-R3	1,015 / 40.0	1,300 / 51.2	740 / 29.1	720 / 28.3	550 / 1,210	220 / 8.66	23 - 46
KFM5-120-R2	1,280 / 50.4	1,540 / 60.6	740 / 29.1	720 / 28.3	600 / 1,320	220 / 8.66	23 - 46
KFM5-120-R3	1,280 / 50.4	1,540 / 60.6	740 / 29.1	720 / 28.3	610 / 1,342	220 / 8.66	23 - 46

Package consists of: forestry mulcher

#### Requirements of carrier machine

40 MPa (400 bar) / 5,760 psi Operating pressure max.: Recommended pump capacity min. - max.: 90 - 300 l/min / 23.8 - 79.3 GPM

Drum options

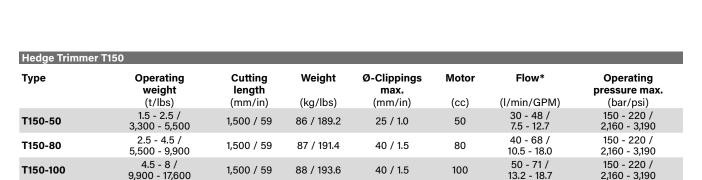




## Hedge Trimmer 1.5-8t / 3,300-17,600lbs

The T150 hedge trimmer is perfectly adapted to excavators from 1.5t / 3,300lbs up to 8t / 17,600lbs operating weight and skid-steer loaders. Thanks to the robust attachment, the hedges and bushes can be cut faster, more precisely and efficiently.

- ▶ High performance, robust design and low maintenance.
- > Fast change from left to right.
- **▷** Cuts branches up to 40mm / 1.5in.
- Exchangeable teeth.
- ▶ **Ready for work delivery** including hydraulic hoses and quick couplings.
- ▶ **Optional: 1m / 39.3in extension** to a full length of 2.5m / 98.4in.
- > Mounting options: double pin suspension for excavator or adapter frame for skid-steer loader.
- > Three different motors available.



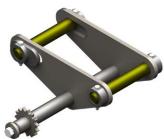
Package consists of: hedge trimmer, hydraulic hoses and quick couplings

<sup>\*</sup> when using a T150 Ext extension the flow must be 45 l/min / 11.9 GPM minimum

Accessories	
Туре	Description
T150 Ext	extension, cutting length: 1,000mm/39.3in, total length: 1,058mm/41.6in, weight: 26kg/57.2lbs
KSW01-T150	adapter for system L-Lock KMS01L/KHS01L for T150 - up to 2t/4,400lbs
KSW03-T150	adapter for system L-Lock KMS03L/KHS03L for T150 – up to 6t/13,200lbs
KSW08-T150	adapter for system L-Lock KMS08L/KHS08L for T150 - up to 12t/26,400lbs

Adapter for excavator mounting or directly with **nox** Tiltrotator available on request





13.2 - 18.7

2,160 - 3,190

adapter for use on excavator

## Rock Grabs with *HPXdrive* 3-9t / 6,600-19,800lbs

Rock grab with the low maintenance HPXdrive for compact excavators up to 6t / 13,200lbs and 9t / 19,800lbs operating weight to position natural rocks, curb stones etc.

- ► HPXdrive the revolutionary concept for hydraulically operated grabs! The rotation of the arms of the grab is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No hydraulic cylinder required!
- ▶ 50% longer life cycle. The drive unit runs in a permanent oil bath, so no lubrication necessary. Resistant against dirt and blows, due to the compact design.
- ▶ **Constant closing force** during the entire operation.
- ▶ Different applications possible thanks to easy **shell exchange system**.



Rock Grabs R05HPX/ R08HPX									
Туре	Width E	Volume	Opening A	Height C min max.	Gripping range D min.	Weight	Load capacity	Closing force	Operating weight
	(mm/in)	(m²)	(mm/in)	(mm/in)	(mm/in)	(kg/lbs)	(kg/lbs)	(kN/lbf)	(t/lbs)
R05HPX-0,16	405 / 15.9	0.16 / 0.11	1,210 / 47.6	780 - 1,000 / 30.7 - 39.3	170 / 6.6	220 / 484	1,000 / 2,200	18 / 3,960	3 - 6 / 6,600 - 13,200
R08HPX-0,16	405 / 15.9	0.16 / 0.11	1,210 / 47.6	795 - 1,005 / 31.2 - 39.6	170 / 6.6	230 / 506	1,000 / 2,200	18 / 3,960	5 - 9 / 11,000 - 19,800

Package consists of: rock grab, KINSHOFER rotator, hose guard and non-return valve

#### KINSHOFER Rotator

Integrated in a single unit with the *HPXdrive*, no more connecting hoses. Continous rotation. Overload protection ensured by pressure relief valves.

Туре	Upper dimension (width x pin-Ø) (mm/in)	<b>Torque</b> (Nm/ft.lbs)	Bending moment max. (Nm/ft.lbs)
R05HPX: KM 04 F140-30VE	84 x 30 / 3.3 x 1.1	850 / 630	3,000 / 2,215
R08HPX: KM 04 F140-30USE	84 x 30 / 3.3 x 1.1	1,000 / 740	8,500 / 6,270

#### Accessories

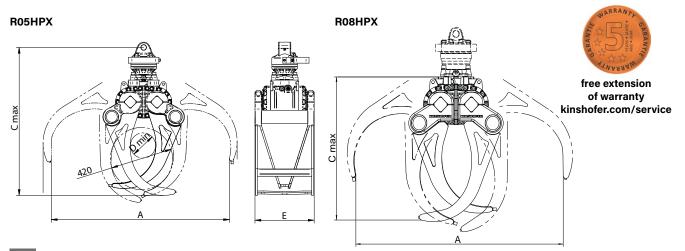
Туре	Description
KM 501 1t-8t	upper suspension without pendulum damper
KM 511 1t-8t	upper suspension with pendulum damper
KM 510 1t-8t	single pendulum damper to upgrade the upper suspension KM 501 1t-8t/2,200-17,600lbs
KSW03 cardanic	adapter for system L-Lock KMS03L/KHS03L incl. cardan link excl. pendulum damper – up to 6t/13,200lbs
KSW03 cardanic-P	adapter for system L-Lock KMS03L/KHS03L incl. cardan link incl. pendulum damper – up to 6t/13,200lbs
KSW08 cardanic	adapter for system L-Lock KMS08L/KHS08L incl. cardan link excl. pendulum damper – up to 12t/26,400lbs
KSW08 cardanic-P	adapter for system L-Lock KMS08L/KHS08L incl. cardan link incl. pendulum damper – up to 12t/26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request
KM 685 06E hook set 2	weld-on hooks (2 pcs.)

#### Requirements of carrier machine

Operating pressure at pump capacity (open/close): Operating pressure at pump capacity (rotate):

26 MPa (260 bar) at max. 75 l/min / 3,745 psi at max. 20 GPM 32 MPa (320 bar) at 15 - max. 50 l/min / 4,640 psi at 4 - max. 13 GPM

26 - 32 MPa (260 - 320 bar) at max. 40 l/min / 3,745 - 4,640 psi at max. 10.6 GPM



## **Exchangeable Shells**

The bucket shells of the *HPXdrive* are bolted to the shafts and therefore very easy to replace with another set of shells. Different types of shells for different applications can be refitted onto the driving unit, e.g. clamshell bucket, rock grab, timber grab, hay and forestry grab and multi purpose clamshell. Other types of shells are available on request.

The interchangeable shells are delivered with an exchange aid that guarantees that the *HPXdrive* can be positioned with ease.











Туре	Operating weight	Width	Volume	Number of teeth	Weight	Load capacity
	(t/lbs)	(mm/in)	(liter/c.y.)		(kg/lbs)	(kg/lbs)
Exchangeable	Shells for Clamshell I	Buckets				
C05HPX-40S	3-5 / 6,600-11,000	400 / 15.7	115 / 0.15	4	100 / 220	3,000 / 6,600
C05HPX-45S	3-5 / 6,600-11,000	450 / 17.7	130 / 0.17	4	125 / 275	3,000 / 6,600
C05HPX-50S	3-5 / 6,600-11,000	500 / 19.6	140 / 0.18	4	130 / 286	3,000 / 6,600
C05HPX-60S	3-5 / 6,600-11,000	600 / 23.6	170 / 0.22	6	145 / 319	3,000 / 6,600
C05HPX-80S	3-5 / 6,600-11,000	800 / 31.4	230 / 0.30	6	180 / 396	3,000 / 6,600
C08HPX-40S	5-8 / 11,000-17,600	400 / 15.7	145 / 0.19	4	110 / 242	3,000 / 6,600
C08HPX-45S	5-8 / 11,000-17,600	450 / 17.7	160 / 0.21	4	135 / 297	3,000 / 6,600
C08HPX-50S	5-8 / 11,000-17,600	500 / 19.6	180 / 0.24	4	145 / 319	3,000 / 6,600
C08HPX-60S	5-8 / 11,000-17,600	600 / 23.6	220 / 0.29	6	150 / 330	3,000 / 6,600
C08HPX-80S	5-8 / 11,000-17,600	800 / 31.4	300 / 0.39	6	195 / 429	3,000 / 6,600



Exchangeable	Shells for Demolition	and Sorting (	Grabs			
D04HPX-40S	2-4 / 4,400-8,800	420 / 16.5	60 / 0.08	-	94 / 206	1,500 / 3,300
D06HPX-45S	3-6 / 6,600-13,200	470 / 18.5	150 / 0.20	-	126 / 277	2,000 / 4,400
D09HPX-50S	6-9 / 13,200-19,800	500 / 19.6	220 / 0.29	-	183 / 402	2,500 / 5,500



Exchangeable	Shells for Multi Purpo	se Grabs				
A04HPX-40S	2-4 / 4,400-8,800	386 / 15.1	70 / 0.09	3	100 / 220	1,500 / 3,300
A06HPX-45S	3-6 / 6,600-13,200	450 / 17.7	145 / 0.19	5	125 / 275	2,000 / 4,400
A09HPX-50S	6-9 / 13,200-19,800	500 / 19.6	210 / 0.27	5	186 / 409	2,500 / 5,500



Excitatigeable	Exchangeable offens for 3-1 mger finiber drabs					
TOBHDY-375	3-5 / 6 600-11 000	375 / 1/17	_	_	95 / 209	1000 / 2 200
10011F X-323	3-3 / 0,000-11,000	3/3 / 14./	_		33 / 203	1,000 / 2,200
TOOLIDY 276	E 0 / 11 000 10 000	275 / 147			05 / 200	2 000 / 4 400
109057-323	5-9 / 11,000-19,600	3/5 / 14./	-	-	95 / 209	2,000 / 4,400
T06HPX-3ZS T09HPX-3ZS	3-5 / 6,600-11,000 5-9 / 11,000-19,800	375 / 14.7 375 / 14.7	-	-	95 / 209 95 / 209	1,000 / 2,200 2,000 / 4,400



Exchangeable S	Shells for Rock Grabs	6				
R05HPX-0,16S	3-5 / 6,600-11,000	400 / 15.7	0.16 m² / 0.11 cords	-	70 / 154	1,000 / 2,200
R08HPX-0,16S	5-8 / 11,000-17,600	400 / 15.7	0.16 m² / 0.11 cords	-	70 / 154	1,000 / 2,200

Package consists of: exchangeable shells, bolt-on teeth (for clamshell buckets & multi purpose grabs), shell exchange support kit

Note: The KINSHOFER HPX drive shells can only be used in combination with KINSHOFER rotator and drive unit HPX drive.

# **Mounting Options for Hydraulic Attachments - cardanic mount**

#### KM 501 - upper suspension without pendulum damper - specify excavator type when ordering



Туре	for rotators	Upper connection rotator (width x pin-Ø) (mm/in)
KM 501 1t-8t	KM 04 F / KM 04 F140-30VE / KM 04 F140-30USE	84 x 30 / 3.31 x 1.18
KM 501 6t-12t	KM 06 F140-40 / KM 07 F180-40	84 x 40 / 3.31 x 1.57
KM 501 9t-12t	KM 10 F275-50	110 x 50 / 4.33 x 1.97
KM 501 13t-25t	KM 10 F275-60	125 x 60 / 4.92 x 2.36
KM 501 19t-60t	KM 15 F340-70 / KM 15 F273-70	180 x 70 / 7.09 x 2.76

#### KM 511 - upper suspension with pendulum damper - specify excavator type when ordering



Туре	for rotators	Upper connection rotator (width x pin-Ø) (mm/in)
KM 511 1t-8t	KM 04 F / KM 04 F140-30VE / KM 04 F140-30USE	84 x 30 / 3.31 x 1.18
KM 511 6t-12t	KM 06 F140-40 / KM 07 F180-40	84 x 40 / 3.31 x 1.57
KM 511 9t-12t	KM 10 F275-50	110 x 50 / 4.33 x 1.97
KM 511 13t-25t	KM 10 F275-60	125 x 60 / 4.92 x 2.36
KM 511 19t-60t	KM 15 F340-70 / KM 15 F273-70	180 x 70 / 7.09 x 2.76

#### KM 510 – single pendulum damper without upper suspension – specify rotator type when ordering



Туре	for rotators	Upper connection rotator (width x pin-Ø) (mm/in)
KM 510 1t-8t	KM 04 F / KM 04 F140-30VE / KM 04 F140-30USE	84 x 30 / 3.31 x 1.18
KM 510 6t-12t	KM 06 F140-40 / KM 07 F180-40	84 x 40 / 3.31 x 1.57
KM 510 9t-12t	KM 10 F275-50	110 x 50 / 4.33 x 1.97
KM 510 13t-25t	KM 10 F275-60	125 x 60 / 4.92 x 2.36
KM 510 19t-60t	KM 15 F340-70 / KM 15 F273-70	180 x 70 / 7.09 x 2.76

### KSW cardanic – adapter for quick coupler system L-Lock incl. cardan link excl. pendulum damper



Туре	for quick coupler L-Lock	Operating weight (t/lbs)
KSW01 cardanic	KMS01L / KHS01L	up to 2 / 4,400
KSW03 cardanic	KMS03L / KHS03L	up to 6 / 13,200
KSW08 cardanic	KMS08L / KHS08L	up to 12 / 26,400

### S cardanic – adapter for quick coupler system S-Lock incl. cardan link excl. pendulum damper



Туре	for quick coupler S-Lock	Operating weight (t/lbs)
S30/180 cardanic	KMS30S-180 / KHS30S-180	up to 2 / 4,400
S40 cardanic	KMS40SL / KHS40S	up to 6 / 13,200
S50 cardanic	KMS50SL / KHS50S	up to 11 / 24,200

# **Mounting Options for Hydraulic Attachments - cardanic mount**

### OQ cardanic - upper suspension with pendulum damper incl. adapter "Oilquick" and hoses



Туре	Operating weight (t / lbs)	
OQ40 cardanic	1 - 5 / 2,200 - 11,000	
OQ45 cardanic	5 - 12 / 11,000 - 26,400	
OQ45-5 cardanic	5 - 12 / 11,000 - 26,400	
OQ60 cardanic	8 - 15 / 17,600 - 33,000	
OQ60-5 cardanic	8 - 15 / 17,600 - 33,000	

### SW cardanic - upper suspension with pendulum damper incl. adapter "Liebherr"



Туре	Operating weight (t / lbs)
SW33 cardanic	8 - 18 / 17,600 - 39,600
SW33 Likufix cardanic*	8 - 18 / 17,600 - 39,600

\*incl. hoses

### CW cardanic - upper suspension with pendulum damper incl. adapter "Verachtert"



Туре	Operating weight (t / lbs)	
CW00 cardanic	up to 1 / 2,200	
CW05 cardanic	up to 3.5 / 7,700	
CW10 cardanic	3.5 - 10.5 / 7,700 - 23,100	
CW20 cardanic**	7.5 - 15 / 16.500 - 33.000	

\*\*also available as smaller S-version

# **Mounting Options for Hydraulic Attachments - rigid mount**

## KM 690 - adapter for rigid mount



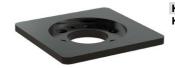
Туре	Operating weight excavator (t / lbs)	
KM 690 2t	up to 2 / 4,400	
KM 690 8t	up to 8 / 17,600	
KM 690 15t	up to 15 / 33,000	

## KM 691 - adapter for specific solutions

 Type
 Operating weight excavator (t / lbs)

 KM 691 2t
 up to 2 / 4,400

 KM 691 8t
 up to 8 / 17,600



KSW rigid - bolt-on adapter for quick coupler system L-Lock			
	Туре	for quick coupler L-Lock	Operating weight (t / lbs)
	KSW01 rigid	KMS01L / KHS01L	up to 2 / 4,400
	KSW03 rigid	KMS03L / KHS03L	up to 6 / 13,200
	KSW08 rigid	KMS08L / KHS08L	up to 12 / 26,400

S rigid - bolt-on	adapter for o	wick couple	r system S-Lock
S Hulu - Doll-oll	auablei iui u	IUICK COUDIE	1 3V3(EIII 3-LUCK



Туре	for quick coupler S-Lock	Operating weight (t / lbs)
S40 rigid	KMS40S / KHS40S	up to 6 / 13,200
S45 rigid	KMS45S / KHS45S	up to 11 / 24,200
S50 rigid	KMS50S / KHS50S	up to 11 / 24,200

# **Mounting Options for Hydraulic Attachments - rigid mount**

#### OQ - bolt-on adapter for system "Oilquick" incl. hoses



Туре	for attachments	Operating weight (t / lbs)
OQ40/2 rigid	breakers	1 - 5 / 2,200 - 11,000
OQ40/4 rigid	grabs, shears	1 - 5 / 2,200 - 11,000
OQ45/2 rigid	breakers	5 - 12 / 11,000 - 26,400
OQ45/4 rigid	grabs, shears	5 - 12 / 11,000 - 26,400
OQ45-5/2 rigid	breakers	5 - 12 / 11,000 - 26,400
OQ45-5/3 rigid	compactors, planers	5 - 12 / 11,000 - 26,400
OQ45-5/4 rigid	grabs, shears	5 - 12 / 11,000 - 26,400
OQ60/2 rigid	breakers	8 - 15 / 17,600 - 33,000
OQ60/4 rigid	grabs, shears	8 - 15 / 17,600 - 33,000
OQ60-5/2 rigid	breakers	8 - 15 / 17,600 - 33,000
OQ60-5/3 rigid	compactors, planers	8 - 15 / 17,600 - 33,000
OQ60-5/4 rigid	grabs, shears	8 - 15 / 17,600 - 33,000

#### SW - bolt-on adapter for system "Liebherr"



Туре	Operating weight (t / lbs)	
SW33 rigid	8 - 18 / 17,600 - 39,600	
SW33 Likufix rigid*	8 - 18 / 17,600 - 39,600	

\*incl. hoses

#### CW - Schraubadapter für Aufnahme an "Verachtert"



Туре	Operating weight (t / lbs)
CW00 rigid	up to 1 / 2,200
CW05 rigid	up to 3.5 / 7,700
CW10 rigid	3.5 - 10.5 / 7,700 - 23,100
CW20 rigid	7.5 - 15 / 16,500 - 33,000
CW20S rigid**	7.5 - 15 / 16,500 - 33,000

\*\*smaller S-version

# Earth Drills 1-5t / 2,200-11,000lbs

### X1500 / X2000 / X2500 / 3000MAX / 3500MAX / 4500MAX

The robust earth drills for micro and mini excavators from 1t / 2,200lbs to 5t / 11,000lbs operating weight are an economical and customized solution for drilling holes for e.g. fencing, road signage, landscaping and tree planting. Well borings, screw pile installations and sound barrier installations are also no problem for the earth drills.

- > Non Dislodgement Shaft (NDS) for more safety and lower down times, as this unique construction prevents the output shaft from dislodgement.
- ▶ Pre-filled with a colored gear oil. Not only is the use of a colored oil a good indicator of correct service, but it also aids identifying possible hydraulic oil leaks.
- ▶ The heavy duty fabricated hoods feature **forged steel ears**; these high strength ears easily transmit the high torsional loads, experienced whilst drilling, without becoming fatigued.
- ▶ Easy access oil service points.



Earth Drills X1	Earth Drills X1500 / X2000 / X2500 / 3000MAX / 3500MAX / 4500MAX						
Туре	Operating weight	Shaft	Rotations	Height	Diameter	Weight	Matching augers
	(t/lbs)	(mm/in)	(/min)	(mm/in)	(mm/in)	(kg/lbs)	
X1500	1 - 2 / 2,200 - 4,400	65 / 2.5 round	44 - 98	585 / 23	200 / 7.8	46 / 101	S4 100 - 400
X2000	1 - 2.5 / 2,200 - 5,500	65 / 2.5 round	43 - 99	585 / 23	200 / 7.8	47 / 103	S4 100 - 450
X2500	1.5 - 3 / 3,300 - 6,600	65 / 2.5 round	36 - 87	585 / 23	200 / 7.8	48 / 105	S4 100 - 500
3000MAX	2 - 4 / 4,400 - 8,800	65 / 2.5 round	36 - 100	665 / 26	244 / 9.6	71 / 156	S4 100 - 600
3500MAX	2.5 - 4.5 / 5,500 - 9,900	65 / 2.5 round	42 - 90	665 / 26	244 / 9.6	73 / 160	S4 100 - 750
4500MAX	3 - 5 / 6,600 - 11,000	65 / 2.5 round	43 - 81	665 / 26	244 / 9.6	75 / 165	S4 100 - 900

#### Package consists of: earth drill

Accessories	
Туре	Description
S4 Ext-E 500	extension for X1500 to 4500MAX and S4 augers – 500mm/19.6in length
S4 Ext-E 1000	extension for X1500 to 4500MAX and S4 augers - 1,000mm/39.3in length
S4 TeleExt-E 1000	telescopic extension for X1500 to 4500MAX and S4 augers - 1,000mm/39.3in length
single pin hitch	for earth drills X1500 to 4500MAX
double pin hitch	for earth drills X1500 to 4500MAX
cradle hitch	for earth drills X1500 to 4500MAX

Technical data						
Туре	X1500	X2000	X2500	3000MAX	3500MAX	4500MAX
Hydr. pressure:	70 - 205 bar	70 - 240 bar	70 - 240 bar	80 - 240 bar	80 - 240 bar	80 - 240 bar
	1,015 - 2,970 psi	1,015 - 3,480 psi	1,015 - 3,480 psi	1,160 - 3,480 psi	1,160 - 3,480 psi	1,160 - 3,480 psi
Oil flow:	20 - 45 l/min	25 - 57 l/min	27 - 65 l/min	27 - 75 l/min	40 - 85 l/min	50 - 95 l/min
	5 - 11.8 GPM	6.5 - 15 GPM	7.1 - 17.2 GPM	7.1 - 20 GPM	10.5 - 22.5 GPM	13 - 25.1 GPM
Torque range:	511 - 1,496 Nm	639 - 2,190 Nm	830 - 2,847 Nm	959 - 2,877 Nm	1,205 - 3,614 Nm	1,500 - 4,499 Nm
	376 - 1,103 ft.lbs	471 - 1,615 ft.lbs	612 - 2,099 ft.lbs	707 - 2,121 ft.lbs	888 - 2,665 ft.lbs	11,06 - 3,318 ft.lbs

#### Options and accessories



double pin hitch





cradle hitch

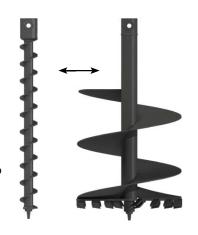
extension

Augers S4

The S4 auger is perfectly matched to the earth drills and every task. A constant spiral configuration and a shallow pitch flight guarantee extreme efficiency and productivity.

Suitable for mini excavators from 1t / 2,200lbs to 5t / 11,000lbs operating weight, mini loaders and skidsteer loaders up to 80 PS.

- ▶ Higher productivity by constant spiral configuration and the perfectly angled tooth holder.
- > Interchangeable pilots and teeth allow for differing ground conditions.
- **▷** Easy fitting of teeth and pilots.
- ▶ Patented Shock Lock-System: incorporating a shock absorbing rubber element to protect the tungsten carbide on the tooth assembly coupled with a solid locking pin to prevent tooth loss.
- ▶ **High flexibility** thanks to different auger extensions.



S4 Augers (specify choice	e of pilot and teetl	n when ordering	)				
Туре	Diameter	Spiral length	Total length	Connection	Weight	Number of teeth	Tooth type
S4-100-E Earth	(mm/in)	(mm/in)	(mm/in)	(mm/in)	(kg/lbs) 17 / 37.4	0	Earth
S4-100-E Earth S4-100-E Tungsten S4-100-E Extra-Dia	100 / 3.9	950 / 37.4	1,200 / 47.2	65 / 2.5 round	17 / 37.4 17 / 37.4 17 / 37.4	0	Tungsten Extra-Dig*
S4-150-E Earth S4-150-E Tungsten	150 / 5.9	780 / 30.7	1,200 / 47.2	65 / 2.5 round	21 / 46.2 22 / 48.4	2	Earth Tungsten
S4-150-E Extra-Dig S4-200-E Earth S4-200-E Tungsten	200 / 7.8	750 / 29.5	1,200 / 47.2	65 / 2.5 round	22 / 48.4 24 / 52.8 24 / 52.8	2 2 2	Extra-Dig* Earth Tungsten
S4-200-E Fungsten S4-200-E Extra-Dig S4-225-E Earth	200 / 1.8	750 / 29.5	1,200 / 47.2	05 / 2.5 Tourid	24 / 52.8 24 / 52.8 27 / 59.4	2 2	Extra-Dig* Earth
S4-225-E Tungsten S4-225-E Extra-Dig	225 / 8.8	750 / 29.5	1,200 / 47.2	65 / 2.5 round	28 / 61.6 27 / 59.4	2 2	Tungsten Extra-Dig*
S4-250-E Earth S4-250-E Tungsten S4-250-E Extra-Dig	250 / 9.8	700 / 27.5	1,200 / 47.2	65 / 2.5 round	27 / 59.4 28 / 61.6 28 / 61.6	3 3 3	Earth Tungsten Extra-Dig*
S4-300-E Earth S4-300-E Tungsten S4-300-E Extra-Dig	300 / 11.8	700 / 27.5	1,200 / 47.2	65 / 2.5 round	32 / 70.4 33 / 72.6 32 / 70.4	4 4 4	Earth Tungsten Extra-Dig*
S4-350-E Earth S4-350-E Tungsten	350 / 13.7	675 / 26.5	1,200 / 47.2	65 / 2.5 round	35 / 77 36 / 79.2	4	Earth Tungsten
S4-400-E Earth S4-400-E Tungsten	400 / 15.7	625 / 24.6	1,200 / 47.2	65 / 2.5 round	36 / 79.2 38 / 83.6 39 / 85.8	4 5 5	Extra-Dig* Earth Tungsten
S4-400-E Extra-Dig S4-450-E Earth S4-450-E Tungsten	450 / 17.7	625 / 24.6	1,200 / 47.2	65 / 2.5 round	38 / 83.6 42 / 92.4 63 / 138.6	5 6 6	Extra-Dig* Earth Tungsten
S4-450-E Extra-Dig S4-500-E Earth S4-500-E Tungsten	500 / 19.6	625 / 24.6	1,200 / 47.2	65 / 2.5 round	63 / 138.6 48 / 105.6 48 / 105.6	6 6 6	Extra-Dig* Earth Tungsten
S4-500-E Extra-Dig S4-600-E Earth S4-600-E Tungsten	600 / 23.6	600 / 23.6	1,200 / 47.2	65 / 2.5 round	48 / 105.6 54 / 118.8 56 / 123.2	6 8 8	Extra-Dig* Earth Tungsten
S4-600-E Extra-Dig S4-750-E Earth	000 / 23.0	000 / 23.0	1,200 / 41.2	03 / 2.3 Tourid	55 / 121 70 / 154	8 9	Extra-Dig* Earth
S4-750-E Tungsten S4-750-E Extra-Dig	750 / 29.5	525 / 20.6	1,200 / 47.2	65 / 2.5 round	71 / 156.2 71 / 156.2	9 9	Tungsten Extra-Dig*
S4-800-E Earth S4-800-E Tungsten S4-800-E Extra-Dig	800 / 31.4	525 / 20.6	1,200 / 47.2	65 / 2.5 round	76 / 167.2 76 / 167.2 76 / 167.2	10 10 10	Earth Tungsten Extra-Dig*
S4-900-E Earth S4-900-E Tungsten S4-900-E Extra-Dig	900 / 35.4	525 / 20.6	1,200 / 47.2	65 / 2.5 round	87 / 191.4 88 / 193.6 88 / 193.6	10 10 10	Earth Tungsten Extra-Dig*

<sup>\*</sup> Extra-dig = tungsten-teeth and extra-dig pilot

# Earth Drills 4.5-8t / 9,900-17,600lbs

# 5500MAX / 7000MAX / 8000MAX

The robust earth drills for excavator from 5t / 11,000lbs to 8t / 17,600lbs operating weight are an economical and customized solution for drilling holes for e.g. fencing, road signage, landscaping and tree planting. Well borings, screw pile installations and sound barrier installations are also no problem for the earth drills. The earth drills are also suitable for backhoes.

- ▶ Non Dislodgement Shaft (NDS) for more safety and lower down times, as this unique construction prevents the output shaft from dislodgement.
- Pre-filled with a colored gear oil. Not only is the use of a colored oil a good indicator of correct service, but it also aids identifying possible hydraulic oil leaks.
- ➤ The heavy duty fabricated hoods feature forged steel ears; these high strength ears easily transmit the high torsional loads, experienced whilst drilling, without becoming fatigued.
- ▶ Easy access oil service points.



Earth Drills 5500MAX / 7000MAX / 8000MAX							
Туре	Operating weight	Shaft	Rotations	Height	Diameter	Weight	Matching augers
	(t/lbs)	(mm/in)	(RPM)	(mm/in)	(mm/in)	(kg/lbs)	-
5500MAX	4.5 - 7 / 9,900 - 15,400	75 / 2.9 square	30 - 87	780 / 30.7	269 / 10.5	108 / 237.6	S5 150 - 750
7000MAX	5 - 7 / 11,000 - 15,400	75 / 2.9 square	36 - 81	780 / 30.7	269 / 10.5	112 / 246.4	S5 150 - 900
8000MAX	6 - 8 / 13,200 - 17,600	75 / 2.9 square	33 - 70	780 / 30.7	269 / 10.5	116 / 255.2	S5 150 - 1000

#### Package consists of: earth drill

Accessories	
Туре	Description
S5 Ext-E 1000	extension for earth drills and S5 augers - 1,000mm/39.3in Länge
S5 Ext-E 1500	extension for earth drills and S5 augers – 1,500mm/59in Länge
S5 Ext-E 2000	extension for earth drills and S5 augers – 2,000mm/78.7in Länge
S5 TeleExt-E 1500	telescopic extension for earth drills and S5 augers from diameter 300mm/11.8in – 1,500mm/59in length
S5 TeleExt-E 2000	telescopic extension for earth drills and S5 augers from diameter 300mm/11.8in – 2,000mm/78.7in length
single pin hitch	for earth drills
double pin hitch	for earth drills
cradle hitch	for earth drills

Technical data			
Туре	5500MAX	7000MAX	8000MAX
Hydraulic pressure:	80 - 260 bar / 1,160 - 3,770 psi	80 - 260 bar / 1,160 - 3,770 psi	80 - 260 bar / 1160 - 3770 psi
Oil flow:	40 - 115 l/min / 10.5 - 30.3 GPM	60 - 135 l/min / 16 - 35.6 GPM	70 - 150 l/min / 18.5 - 40 GPM
Torque range:	1,685 - 5,477 Nm / 1,242 - 4,039 ft.lbs	2,133 - 6,931 Nm / 1,573 - 5,111 ft.lbs	2,717 - 8,152 Nm / 2,003 - 6,012 ft.lbs

#### Options and accessories



**S5** 

# **Augers**

The S5 auger is perfectly matched to the corresponding earth drills and every task. A constant spiral configuration and a shallow pitch flight guarantee extreme efficiency and productivity. Suitable for excavators from 4.5t / 9,900lbs to 8t / 17,600lbs operating weight, telehandlers and high flow skidsteer loaders.

- ▶ Higher productivity by constant spiral configuration and the perfectly angled tooth holder.
- > Interchangeable pilots and teeth allow for differing ground conditions.
- Easy fitting of teeth and pilots.
- Patented Shock Lock-System: incorporating a shock absorbing rubber element to protect the tungsten carbide on the tooth assembly coupled with a solid locking pin to prevent tooth loss.
- ▶ High flexibility thanks to different auger extensions and telescopic extensions.



S5 Augers (specify choice of pilot and teeth when ordering)							
Туре	Diameter	Spiral length	Total length	Connection	Weight	Number of teeth	Tooth type
	(mm/in)	(mm/in)	(mm/in)	(mm/in)	(kg/lbs)		
S5-150-E Earth	450 / 50		4500 / 50	== / 0 0	36 / 79.2	0	Earth
S5-150-E Tungsten	150 / 5.9	1,080 / 42.5	1,500 / 59	75 / 2.9 square	36 / 79.2	0	Tungsten
S5-150-E Rock					37 / 81.4	2	Rock
S5-200-E Earth	000 / 70	077 / 00 4	1500 / 50	75 / 0 0	41 / 90.2	2	Earth
S5-200-E Tungsten	200 / 7.8	977 / 38.4	1,500 / 59	75 / 2.9 square	40 / 88	2 3	Tungsten
S5-200-E Rock S5-225-E Earth					40 / 88 45 / 99	2	Rock Earth
S5-225-E Earth S5-225-E Tungsten	225 / 8.8	975 / 38.3	1,500 / 59	75 / 2.9 square	44 / 96.8	2	Tungsten
S5-225-E Tungsten	223 / 0.0	910 / 30.3	1,500 / 59	75 / 2.5 Square	44 / 96.8	4	Rock
S5-250-E Earth					46 / 101.2	2	Earth
S5-250-E Tungsten	250 / 9.8	965 / 37.9	1,500 / 59	75 / 2.9 square	46 / 101.2	2	Tungsten
S5-250-E Rock	200 / 3.0	300 / 31.3	1,000 / 00	, 0 / 210 Square	45 / 99	4	Rock
S5-300-E Earth					51 / 112.2	4	Earth
S5-300-E Tungsten	300 / 11.8	900 / 35.4	1,500 / 59	75 / 2.9 square	51 / 112.2	4	Tungsten
S5-300-E Rock	300, 1	000,00	.,000,00	70 7 2.0 0qua.0	50 / 110	5	Rock
S5-350-E Earth					56 / 123.2	4	Earth
S5-350-E Tungsten	350 / 13.7	900 / 35.4	1,500 / 59	75 / 2.9 square	56 / 123.2	4	Tungsten
S5-350-E Rock			,		55 / 121	6	Rock
S5-400-E Earth					62 / 136.4	5	Earth
S5-400-E Tungsten	400 / 15.7	875 / 34.4	1,500 / 59	75 / 2.9 square	61 / 134.2	5	Tungsten
S5-400-E Rock					59 / 129.8	7	Rock
S5-450-E Earth					66 / 145.2	6	Earth
S5-450-E Tungsten	450 / 17.7	750 / 29.5	1,500 / 59	75 / 2.9 square	66 / 145.2	6	Tungsten
S5-450-E Rock					63 / 138.6	8	Rock
S5-500-E Earth					73 / 160.6	6	Earth
S5-500-E Tungsten	500 / 19.6	750 / 29.5	1,500 / 59	75 / 2.9 square	73 / 160.6	6	Tungsten
S5-500-E Rock					73 / 160.6	6	Rock
S5-600-E Earth					84 / 184.8	8	Earth
S5-600-E Tungsten	600 / 23.6	750 / 29.5	1,500 / 59	75 / 2.9 square	84 / 184.8	8	Tungsten
S5-600-E Rock					82 / 180.4	11	Rock
S5-750-E Earth	750 / 20 5	700 / 075	1500 / 50	75 / 2 0 0 0 0 0 0 0 0 0 0 0	101 / 222.2	9	Earth
S5-750-E Tungsten S5-750-E Rock	750 / 29.5	700 / 27.5	1,500 / 59	75 / 2.9 square	101 / 222.2 95 / 209	9 14	Tungsten Rock
S5-800-E Earth					109 / 239.8	9	Earth
S5-800-E Earth S5-800-E Tungsten	800 / 31.4	700 / 27.5	1,500 / 59	75 / 2.9 square	109 / 239.8	9	Tungsten
S5-800-E rungsten	000 / 31.4	100 / 21.0	1,500 / 58	13 / 2.3 Square	113 / 248.6	9 15	Rock
S5-900-E Farth					137 / 301.4	10	Earth
S5-900-E Tungsten	900 / 35.4	700 / 27.5	1,500 / 59	75 / 2.9 square	137 / 301.4	10	Tungsten
S5-900-E Rock	000 / 0017	700 / 2110	1,000 / 00	. o / Lio square	133 / 292.6	17	Rock
S5-1000-E Earth					119 / 261.8	11	Earth
S5-1000-E Tungsten	1,000 / 39.3	525 / 20.6	1,500 / 59	75 / 2.9 square	119 / 261.8	11	Tungsten
S5-1000-E Rock	,		,		133 / 292.6	19	Rock

# Earth Drills 8-15t / 17,600-33,000lbs

The robust earth drills 12000MAX for excavator from 8t/17,600lbs to 13t/28,600lbs and 15000MAX for excavator from 10t/22,000lbs to 15t/33,000lbs operating weight are an economical and customized solution for drilling holes for e.g. fencing, road signage, landscaping and tree planting. Well borings, screw pile installations and sound barrier installations are also no problem for the earth drills.

- ▶ Non Dislodgement Shaft (NDS) for more safety and lower down times, as this unique construction prevents the output shaft from dislodgement.
- > Pre-filled with a colored gear oil. Not only is the use of a colored oil a good indicator of correct service, but it also aids identifying possible hydraulic oil leaks.
- ▶ The heavy duty fabricated hoods feature forged steel ears; these high strength ears easily transmit the high torsional loads, experienced whilst drilling, without becoming
- **▷** Easy access oil service points.



120	00	М	A
-----	----	---	---

Earth Drill 12000MAX / 15000MAX						
Туре	Shaft	Rotations	Height	Diameter	Weight	Matching
	(mm/in)	(RPM)	(mm/in)	(mm/in)	(kg/lbs)	augers
12000MAX	75 / 2.9 square	25 - 54	930 / 36.6	290 / 11.4	172 / 378.4	S6 150 - 1000
15000MAX	75 / 2.9 square	20 - 43	930 / 36.6	290 / 11.4	173 / 380.6	S6 150 - 1200

#### Package consists of: earth drill

Accessories	
Туре	Description
S6 Ext-E 1500	extension for earth drills 12000MAX and 15000MAX and S6 augers – 1,500mm/59in length
S6 Ext-E 2000	extension for earth drills 12000MAX and 15000MAX and S6 augers – 2,000mm/78.7in length
S6 Ext-E 2500	extension for earth drills 12000MAX and 15000MAX and S6 augers – 2,500mm/98.4in length
S6 Ext-E 3000	extension for earth drills 12000MAX and 15000MAX and S6 augers – 3,000mm/118.1in length
S6 TeleExt-E 1500	telescopic extension for earth drills 12000MAX and 15000MAX and S6 augers from diameter 300mm/11.8in – 1,500mm/59in length
S6 TeleExt-E 2000	telescopic extension for earth drills 12000MAX and 15000MAX and S6 augers from diameter 300mm/11.8in – 2,000mm/78.7in length
single pin hitch	for earth drills 12000MAX and 15000MAX
double pin hitch	for earth drills 12000MAX and 15000MAX
cradle hitch	for earth drills 12000MAX and 15000MAX
PRV-15000MAX-25000MAX	pressure relief valve kit 240 bar / 3,456 psi
Valve-160LPM	for earth drill 15000MAX to rotate bi-directionally with the hammer hydraulic when there is no double- acting hammer circuit available

Technical data		
	12000MAX	15000MAX
Hydraulic pressure:	80 - 240 bar / 1,160 - 3,480 psi	80 - 240 bar / 1,160 - 3,480 psi
Oil flow:	80 - 170 l/min / 21 - 44.9 GPM	80 - 170 l/min / 21 - 44.9 GPM
Torque range:	3,998 - 11,995 Nm / 2,948 - 8,846 ft.lbs	5,024 - 15,071 Nm / 3,705 - 11,114 ft.lbs

#### Options and accessories









bi-directional valve



cradle hitch



pressure limitation

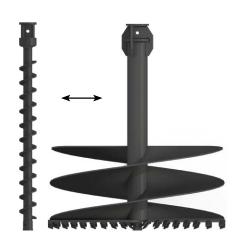


extension / telescopic extension

Augers S6

The S6 auger is perfectly matched to the corresponding earth drills and every task. A constant spiral configuration and a shallow pitch flight guarantee extreme efficiency and productivity. Suitable for excavators from 8t / 17,600lbs to 15t / 33,000lbs operating weight and backhoes.

- Higher productivity by constant spiral configuration and the perfectly angled tooth holder.
- ▶ Interchangeable pilots and teeth allow for differing ground conditions.
- > Easy fitting of teeth and pilots.
- ▶ Patented Shock Lock-System: incorporating a shock absorbing rubber element to protect the tungsten carbide on the tooth assembly coupled with a solid locking pin to prevent tooth loss.
- ▶ High flexibility thanks to different auger extensions and telescopic extensions.



Гуре	Diameter	Spiral	Total	Connection	Weight	Number	Tooth
Турс		length	length		· ·	of teeth	type
	(mm/in)	(mm/in)	(mm/in)	(mm/in)	(kg/lbs)	_	
66-150-E Earth					58 / 116	0	Earth
66-150-E Tungsten	150 / 5.9	1,320 / 51.9	1,880 / 74	75 / 2.9 square	58 / 116	0	Tungster
66-150-E Rock					58 / 116	2	Rock
66-200-E Earth					55 / 121	2	Earth
66-200-E Tungsten	200 / 7.8	1,200 / 47.2	1,880 / 74	75 / 2.9 square	59 / 129.8	2	Tungster
6-200-E Rock					59 / 129.8	3	Rock
6-225-E Earth					62 / 136.4	2	Earth
6-225-E Tungsten	225 / 8.8	1,203 / 47.3	1,880 / 74	75 / 2.9 square	62 / 136.4	2	Tungster
66-225-E Rock					62 / 136.4	4	Rock
6-250-E Earth					67 / 147.4	2	Earth
6-250-E Tungsten	250 / 9.8	1,225 / 48.2	1,880 / 74	75 / 2.9 square	67 / 147.4	2	Tungster
6-250-E Rock		,	,		66 / 145.2	4	Rock
6-300-E Earth					82 / 180.4	4	Earth
6-300-E Tungsten	300 / 11.8	1,200 / 47.2	1,880 / 74	75 / 2.9 square	82 / 180.4	4	Tungster
6-300-E Rock	000 / 11.0	1,200 / 41.2	1,000 / 14	70 / 2.0 Square	81 / 178.2	5	Rock
6-350-E Farth					90 / 198	4	Earth
6-350-E Earth 6-350-E Tungsten	350 / 13.7	1,125 / 44.2	1,880 / 74	75 / 2.9 square	90 / 198	4	Tungster
•	350 / 13.7	1,125 / 44.2	1,880 / 74	75 / 2.9 Square		6	•
6-350-E Rock					89 / 195.8		Rock
66-400-E Earth	400 / 45 7	4000 / 000	4000 / 74	75 / 0.0	98 / 215.6	5	Earth
6-400-E Tungsten	400 / 15.7	1,000 / 39.3	1,880 / 74	75 / 2.9 square	98 / 215.6	5	Tungster
6-400-E Rock					97 / 213.4	7	Rock
6-450-E Earth					111 / 244.2	6	Earth
6-450-E Tungsten	450 / 17.7	1,000 / 39.3	1,880 / 74	75 / 2.9 square	111 / 244.2	6	Tungster
6-450-E Rock					109 / 239.8	8	Rock
6-500-E Earth					125 / 275	6	Earth
6-500-E Tungsten	500 / 19.6	1,000 / 39.3	1,880 / 74	75 / 2.9 square	125 / 275	6	Tungster
66-500-E Rock					123 / 270.6	9	Rock
6-600-E Earth					137 / 301.4	8	Earth
6-600-E Tungsten	600 / 23.6	900 / 35.4	1,880 / 74	75 / 2.9 square	138 / 303.6	8	Tungster
6-600-E Rock			,		136 / 299.2	11	Rock
66-750-E Earth					168 / 369.6	9	Earth
66-750-E Tungsten	750 / 29.5	875 / 34.4	1,880 / 74	75 / 2.9 square	168 / 369.6	9	Tungster
66-750-E Rock		0.0,011	.,000, , ,	. 0 / oquai 0	170 / 374	14	Rock
6-800-E Earth					189 / 415.8	9	Earth
66-800-E Tungsten	800 / 31.4	875 / 34.4	1,880 / 74	75 / 2.9 square	189 / 415.8	9	Tungster
66-800-E Rock	000 / 31.4	010 / 34.4	1,000 / 14	70 / 2.0 Square	187 / 411.4	15	Rock
6-900-E Earth					224 / 492.8	10	Earth
	000 / 25 4	975 / 24 4	1000 / 74	75 / 2.0 square		10	
6-900-E Tungsten	900 / 35.4	875 / 34.4	1,880 / 74	75 / 2.9 square	224 / 492.8		Tungster
6-900-E Rock					221 / 486.2	17	Rock
66-1000-E Earth	4000 / 000	700 / 07 5	1000 /=:	75 / 0.0	229 / 503.8	11	Earth
66-1000-E Tungsten	1,000 / 39.3	700 / 27.5	1,880 / 74	75 / 2.9 square	229 / 503.8	11	Tungster
6-1000-E Rock					226 / 497.2	19	Rock
6-1200-E Earth					316 / 695.2	15	_ Earth
6-1200-E Tungsten	1,200 / 47.2	600 / 23.6	1,880 / 74	75 / 2.9 square	316 / 695.2	15	Tungster
6-1200-E Rock					316 / 695.2	23	Rock
6-1500-E Earth					-	-	Earth
66-1500-E Tungsten	1,500 / 59	600 / 23.6	1,880 / 74	75 / 2.9 square	-	-	Tungster
6-1500-E Rock				•	_	_	Rock

### **In-Site Monitor**

The In-Site range of products are the must have tool to enable you to perform with the required accuracy, precision and efficiency across all your torque applications. With three variants, In-Site is perfect for operators in all environments to get the best possible performance from their drive units.

Data can be viewed in real-time, allowing immediate adjustments as required to help keep jobsites as problem free as possible. Data can also be viewed offline in an easy to use dashboard format to give that enhanced level of understanding.

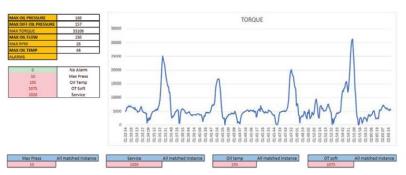
- ▶ Plug-and-Play
- ▶ Real time data analysis
- Wireless touch screen display
- ▶ Alignment monitor
- ▶ Pressure readouts
- ▷ Calculated torque value
- > Internal oil temperature records
- Time and date stamp of data
- ▶ Unit switch from metric to imperial
- ▶ Servicing alarm
- Temperature alarm
- Total run time





In-Site Monitor						
Туре	Alignment sensor	Pressure sensor	Flow sensor (mm)	Temperature sensor (mm)	Earth drill compatibility	Operating weight (t/lbs)
In-Site Align	<b>✓</b>	-	-	-	from X1500	> 1 / 2,200
In-Site Data	<b>✓</b>	<b>√</b>	-	-	from X1500	> 1 / 2,200
In-Site Data Plus	<b>✓</b>	<b>✓</b>	500 x 325 / 19.7 x 12.8	320 x 310 / 12.6 x 12.2	from 20000MAX	> 13 / 28,600

#### Example





# Stump Planer & Log Splitter 1-8t / 2,200-17,600lbs

# SP / Log Splitter

The robust stump planers for excavators up to 8t / 17,600lbs and skidsteers guarantee an efficient and clean removal of tree stumps. The robust stump planers are compatible to the most earth drills offered here.

The log splitter for excavators with up to 8t / 17,600lbs operating weight provide for an effective and simple log splitting.

#### **Stump Planer:**

- ▶ **Different hub options** suitable to the respective earth drill available.
- ▶ The **unique pilot** is drilling into the tree stump and pulling down the planer unerringly.
- ▶ Due to the arrangement of the blades, a new cut is done at each turn.
- ▶ The tree stump is planed off to small and easy to clean splints.

#### Log Splitter:

- ▶ Pilot and splitter with self-guiding thread.
- ▶ Pilot made of hardened steel.



Stump Plane	rs SP250 / SP350					
Туре	Operating weight	For earth drills	Diameter	Length	Weight	Hub options (specify when ordering)
	(t/lbs)		(mm/in)	(mm/in)	(kg/lbs)	(mm/in)
SP250-65	1 - 5 / 2,200 - 11,000	X2500 - 4500 MAX	250 / 9.8	635 / 25	25 / 55	65 / 2.5 round
SP250-75	1 - 5 / 2,200 - 11,000	X2500 - 4500 MAX	250 / 9.8	635 / 25	25 / 55	75 / 2.9 square
SP350-65 SP350-75	4.5 - 8 / 9,900 - 17,600 4.5 - 8 / 9,900 - 17,600	5000 - 8000MAX 5000 - 8000MAX	350 / 13.7 350 / 13.7	675 / 26.5 675 / 26.5	33 / 72.6 33 / 72.6	65 / 2.5 round 75 / 2.9 square

#### Package consists of: stump planer

Log Splitter						
Туре	Operating weight	For earth drills	Diameter	Length	Weight	Hub options
	(t/lbs)		(mm/in)	(mm/in)	(kg/lbs)	(mm/in)
Log Splitter	1 - 8 / 2,200 - 17,600	X1500 - 8000MAX	180 / 7.0	300 / 11.8	13 / 28.6	65 / 2.5 round

Only use in combination with cradle hitch with lock pin - see below: Accessories.

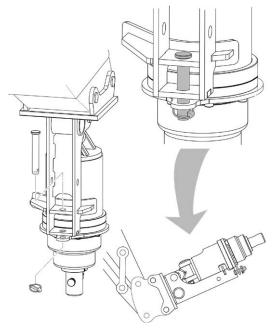
#### Package consists of: log splitter

Accessories	
Туре	Description
KM 690-X1500-X2500 Cradle Lock	lock pin for cradle hitch X1500 - X2500
KM 690-3000MAX-4500MAX Cradle Lock	lock pin for cradle hitch 3000MAX - 4500MAX
KM 690-5500MAX-8000MAX Cradle Lock	lock pin for cradle hitch 5500MAX - 8000MAX

#### Technical drawings



When the stump planer has cut deep enough, a new cutting position can be set and the procedure repeated until the stump is removed.



Obligatory cradle hitch with lock pin for Log Splitter

# Mounting options for Earth Drills up to 15t / 33,000lbs

### Single pin hitches



Туре	for earth drills	with pin Ø (mm/in)	for operating weight (t/lbs)
KM 501-X1500-4500MAX-25	X1500 - 4500MAX	25 / 0.98	1 - 5 / 2,200 - 11,000
KM 501-X1500-4500MAX-30	X1500 - 4500MAX	30 / 1.18	1 - 5 / 2,200 - 11,000
KM 501-X1500-4500MAX-32	X1500 - 4500MAX	32 / 1.26	1 - 5 / 2,200 - 11,000
KM 501-X1500-4500MAX-35	X1500 - 4500MAX	35 / 1.38	1 - 5 / 2,200 - 11,000
KM 501-X1500-4500MAX-38	X1500 - 4500MAX	38 / 1.49	1 - 5 / 2,200 - 11,000
KM 501-X1500-4500MAX-40	X1500 - 4500MAX	40 / 1.57	1 - 5 / 2,200 - 11,000
KM 501-7000MAX-8000MAX-40	7000MAX / 8000MAX	40 / 1.57	4.5 - 8 / 9,900 - 17,600*
KM 501-7000MAX-8000MAX-44,5	7000MAX / 8000MAX	44,5 / 1.75	4.5 - 8 / 9,900 - 17,600*
KM 501-7000MAX-8000MAX-45	7000MAX / 8000MAX	45 / 1.77	4.5 - 8 / 9,900 - 17,600*
KM 501-7000MAX-8000MAX-50	7000MAX / 8000MAX	50 / 1.97	4.5 - 8 / 9,900 - 17,600*
KM 501-7000MAX-8000MAX-55	7000MAX / 8000MAX	55 / 2.17	4.5 - 8 / 9,900 - 17,600*
KM 501-7000MAX-8000MAX-60	7000MAX / 8000MAX	60 / 2.36	4.5 - 8 / 9,900 - 17,600*
KM 501-15000MAX-25000MAX-44,5	12000MAX / 15000MAX	44,5 / 1.75	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-45	12000MAX / 15000MAX	45 / 1.77	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-50	12000MAX / 15000MAX	50 / 1.97	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-55	12000MAX / 15000MAX	55 / 2.17	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-60	12000MAX / 15000MAX	60 / 2.36	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-65	12000MAX / 15000MAX	65 / 2.56	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-70	12000MAX / 15000MAX	70 / 2.76	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-75	12000MAX / 15000MAX	75 / 2.95	8 - 22 / 17,600 - 48,400
KM 501-15000MAX-25000MAX-80	12000MAX / 15000MAX	80 / 3.15	8 - 22 / 17,600 - 48,400
			*and for backhoe loader

Cardan link with system L-Lock



Туре	for earth drills	w/adapter	for operating weight (t/lbs)
KSW01-X1500	X1500	KSW01	1 - 2 / 2,200 - 4,400
KSW01-X2000	X2000	KSW01	1 - 2.5 / 2,200 - 5,500
KSW03-X2500	X2500	KSW03	1.5 - 3 / 3,300 - 6,600
KSW03-3000MAX	3000MAX	KSW03	2 - 4 / 4,400 - 8,800
KSW03-3500MAX	3500MAX	KSW03	2.5 - 4.5 / 5,500 - 9,900
KSW03-4500MAX	4500MAX	KSW03	3 - 5 / 6,600 - 11,000
KSW03-7000MAX	7000MAX	KSW03	5 - 7/ 11,000 - 15,400*
KSW08-7000MAX	7000MAX	KSW08	5 - 7/ 11,000 - 15,400*
KSW08-8000MAX	8000MAX	KSW08	6 - 8 / 13,200 - 17,600
KSW10-15000MAX	12000MAX / 15000MAX	KSW10	10 - 15 / 22,000 - 33,000 *and for backhoe loader

#### Cradle hitch with system L-Lock



Туре	for earth drills	w/adapter	for operating weight (t/lbs)
KSW01-X1500 Cradle	X1500	KSW01	1 - 2 / 2,200 - 4,400
KSW01-X2000 Cradle	X2000	KSW01	1 - 2.5 / 2,200 - 5,500
KSW03-X2500 Cradle	X2500	KSW03	1.5 - 3 / 3,300 - 6,600
KSW03-3000MAX Cradle	3000MAX	KSW03	2 - 4 / 4,400 - 8,800
KSW03-3500MAX Cradle	3500MAX	KSW03	2.5 - 4.5 / 5,500 - 9,900
KSW03-4500MAX Cradle	4500MAX	KSW03	3 - 5 / 6,600 - 11,000
KSW03-7000MAX Cradle	7000MAX	KSW03	5 - 7/ 11,000 - 15,400*
KSW08-7000MAX Cradle	7000MAX	KSW08	5 - 7/ 11,000 - 15,400*
KSW08-8000MAX Cradle	8000MAX	KSW08	6 - 8 / 13,200 - 17,600
KSW10-15000MAX Cradle	12000MAX / 15000MAX	KSW10	10 - 15 / 22,000 - 33,000 *and for backhoe loader

#### Lower part of hitch for specific solution



Туре	for earth drills	for operating weight (t/lbs)
KM 691-X2000-8000MAX	X2000 - 8000MAX	1 - 8 / 2,200 - 17,600*
KM 691-15000MAX-25000MAX	12000MAX - 25000MAX	10 - 22 / 22,000 - 48,400 *and for backhoe loader

## Lower part of cradle hitch for specific solution



Туре	for earth drills	for operating weight (t/lbs)
KM 691-X2000-X2500 Cradle	X2000 - X2500	1.5 - 3 / 3,300 - 6,600
KM 691-3000MAX-4500MAX Cradle	3000MAX - 4500MAX	2 - 5 / 4,400 - 11,000
KM 691-7000MAX-8000MAX Cradle	7000MAX / 8000MAX	5 - 8 / 11,000 - 17,600*
KM 691-15000MAX Cradle	12000MAX / 15000MAX	10 - 15 / 22,000 - 33,000 *and for backhoe loader

# Cable Ploughs and Tube Layer 3-12t / 6,600-26,400lbs

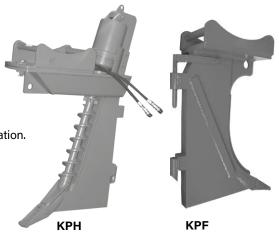
KPF / KPH / KPL

The Cable Ploughs are efficient tools to drill channels for cables or hoses. Depending on the type, the plough is suitable for excavators with

up to 12t / 26,400lbs operating weight.

The ploughs are available as mechanical (KPF) and hydraulic (KPH) version.

- ▶ **Solid Design:** very robust without protruding parts.
- ▶ **Robust:** also drills hard soil.
- ▶ **Plough kinematics:** easy plowing, even through roots and other vegetation.
- ▶ **Easy installation** onto the carrier machine.
- ▶ Different widths available.
- ▶ One work step: opening for positioning of cables or hoses in the channel saves time.
- > Safety: better balance between plough and carrier.
- ▶ KPH: incl. hydraulic auger.
- > Optional: KPL tube layer incl. cable drum mountable.



<b>Cable Ploughs</b>	KPF / KPH and Tube Layer KP	L		
Туре	Lower plough width	Height	Weight	Operating weight
	(mm/in)	(mm/in)	(kg/lbs)	(t/lbs)
KPF 06	50 / 1.9	650 / 25.5	180 / 396	3-6 / 6,600-13,200
KPF 10	50 / 1.9	1,000 / 39.3	220 / 484	6-10 / 13,200-22,000
KPH 12	70 / 2.7	1,000 / 39.3	250 / 550	11-12 / 24,200-26,400
KPL 01	30 / 1.1	650 / 25.5	50 / 110	-
KPL 02	30 / 1.1	1,000 / 39.3	60 / 132	-
KPL 03	40 / 1.5	1,000 / 39.3	65 / 143	-
KPL 04	50 / 1.9	1,000 / 39.3	70 / 154	-
KPL 05	60 / 2.3	1,000 / 39.3	75 / 165	-
KPL 06	70 / 2.7	1,000 / 39.3	95 / 209	-
KPL 07	95 / 3.7	1,000 / 39.3	115 / 253	-
KPL 08	120 / 4.7	1,000 / 39.3	140 / 308	-

Package consists of: cable plough or tube layer (KPL incl. support for marker tape)

Accessories	
Туре	Description
KST 09	support for marker tape at tube layer
KST 12	wire rope between cable plough and carrier machine - length 4,500mm/177.1in
KM 690 8t	adapter for rigid mounting – up to 8t/17,600lbs
KM 690 15t	adapter for rigid mounting – up to 15t/33,000lbs
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t/13,200lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting – up to 12t/26,400lbs
OQ45/2 rigid	bolt-on adapter for OilQuick OQ45 – up to 12t/26,400lbs
	adapters for quick change systems from other manufacturers or different sizes on request

#### Requirements of carrier machine

Operating pressure max.: 240 bar / 3,480 psi Recommended flow: 27 - 75 I/min / 7.1 - 20 GPM



KPF cable plough with KPL tube layer

# Trenchers 2.5-5t / 5,500-11,000lbs

#### MT600 / MT900

The robust trenchers MT600 and MT900 for mini excavators with up to 5t / 5,500lbs operating weight, mini loaders and skidsteer loaders make your work easy and fast e.g. when placing gas and water pipes, electric or fibre optic cables, for drainages or irrigations, etc.

- ▶ Variable trench widths from 100mm / 3.9in 300mm / 11.8in possible.
- ▶ **Adjustable depth control** allows for 3 different depth settings.
- ▶ Different mounting options available: side shift frame, mini loader frame and excavator hitch.
- ▶ Wear parts easily exchanged on site.
- ▷ Dirt being removed from the trench is placed off to one side due to the single sided auger effortless backfilling.
- ▶ Three different chain options available: earth, combination and tungsten.



Trenchers MT600 and MT900							
Туре	Operating weight (t/lbs)	Drive width (mm/in)	Drive height (mm/in)	Drive length (mm/in)	Weight* (kg/lbs)	Trenching width** (mm/in)	Depth settings A - B - C (mm/in)
MT600	2.5 - 4.5 / 5,500 - 9,900	850 / 33.4	736 / 28.9	1,465 / 57.6	230 / 506	100 - 200 / 3.9 - 7.8	300 - 450 - 600 / 11.8 - 17.7 - 23.6
MT900	3 - 5 / 6,600 - 11,000	850 / 33.4	736 / 28.9	1,800 / 70.8	243 / 534.6	100 - 300 / 3.9 - 11.8	600 - 750 - 900 / 23.6 - 29.5 - 35.4

<sup>\*</sup>without motor and chain \*\* depending on chain

Package consists of: trencher, depth control plate, lateral auger

Chain options	
Туре	Description
MT600-100 Earth	with earth teeth for soft soils, width 100mm/3.9in
MT600-150 Earth	with earth teeth for soft soils, width 150mm/5.9in
MT600-200 Earth	with earth teeth for soft soils, width 200mm/7.8in
MT600-100 Combi MT600-150 Combi	with earth and tungsten teeth for different soils, width 100mm/3.9in
MT600-150 Combi	with earth and tungsten teeth for different soils, width 150mm/5.9in with earth and tungsten teeth for different soils, width 200mm/7.8in
MT600-200 Combi	with tungsten teeth for asphalt and frozen soils, width 100mm/3.9in
MT600-150 Tungsten	with tungsten teeth for asphalt and frozen soils, width 150mm/5.9in
MT600-200 Tungsten	with tungsten teeth for asphalt and frozen soils, width 200mm/7.8in
MT900-100 Earth	with earth teeth for soft soils, width 100mm/3.9in
MT900-150 Earth	with earth teeth for soft soils, width 150mm/5.9in
MT900-200 Earth	with earth teeth for soft soils, width 200mm/7.8in
MT900-300 Earth	with earth teeth for soft soils, width 300mm/11.8in
MT900-100 Combi	with earth and tungsten teeth for different soils, width 100mm/3.9in
MT900-150 Combi	with earth and tungsten teeth for different soils, width 150mm/5.9in
MT900-200 Combi	with earth and tungsten teeth for different soils, width 200mm/7.8in
MT900-300 Combi	with earth and tungsten teeth for different soils, width 300mm/11.8in
MT900-100 Tungsten	with tungsten teeth for asphalt and frozen soils, width 100mm/3.9in
MT900-150 Tungsten MT900-200 Tungsten	with tungsten teeth for asphalt and frozen soils, width 150mm/5.9in with tungsten teeth for asphalt and frozen soils, width 200mm/7.8in
MT900-200 Tungsten	with tungsten teeth for asphalt and frozen soils, width 300mm/11.8in
wit 900-300 fullystell	with tungsten teeth for aspiralt and nozen sons, with 300mm/ n.om

Technical data		
	MT600	MT900
Hydraulic pressure range:	160 - 240 bar / 2,320 - 3,480 psi	180 - 240 bar / 2,610 - 3,480 psi
Oil flow:	35 - 65 l/min / 9 - 17.2 GPM	45 - 80 l/min / 11.8 - 21 GPM

The robust trenchers for excavators with up to 10t / 22,000lbs operating weight and skidsteer loaders make your work easy and fast e.g. when placing gas and water pipes, electric or fibre optic cables, for drainages or irrigations, etc.

- ▶ Variable trench widths from 150mm / 5.9in 350mm / 13.7in possible.
- ▶ Adjustable depth control allows for 3 different depth settings.
- ▶ **Different mounting options** available: side shift frame and excavator hitch.
- ▶ Wear parts easily exchanged on site.
- ▷ Dirt being removed from the trench is placed off to one side due to the single sided auger - effortless backfilling.
- ▶ Three different chain options available: earth, combination and tungsten.



Trenchers XHD900 / XHD1200 / XHD1500							
Туре	Operating weight (t/lbs)	Drive width (mm/in)	Drive height (mm/in)	Drive length (mm/in)	Weight* (kg/lbs)	Trenching width** (mm/in)	Depth settings A - B - C (mm/in)
XHD900-2K	5 - 7.5 / 11,000 - 16,500	1,018 / 40	808 / 31.8	1,962 / 77.2	420 / 924	150 - 350 / 5.9 - 13.7	600 - 750 - 900 / 23.6 - 29.5 - 35.4
XHD900-4K	5 - 7.5 / 11,000 - 16,500	1,018 / 40	808 / 31.8	1,962 / 77.2	420 / 924	150 - 350 / 5.9 - 13.7	600 - 750 - 900 / 23.6 - 29.5 - 35.4
XHD1200-2K	5 - 7.5 / 11,000 - 16,500	1,018 / 40	808 / 31.8	2,262 / 89	439 / 965.8	150 - 300 / 5.9 - 11.8	800 - 1,000 - 1,200 / 31.4 - 39.3 - 47.2
XHD1200-4K	5 - 7.5 / 11,000 - 16,500	1,018 / 40	808 / 31.8	2,262 / 89	439 / 965.8	150 - 300 / 5.9 - 11.8	800 - 1,000 - 1,200 / 31.4 - 39.3 - 47.2
XHD1500-4K	5 - 10 / 11,000 - 22,000	1,018 / 40	808 / 31.8	2,562 / 100.8	460 / 1012	150 - 200 / 5.9 - 7.8	1,000 - 1,250 - 1,500 / 39.3 - 49.2 - 59.0

<sup>\*</sup>without motor and chain \*\* depending on chain

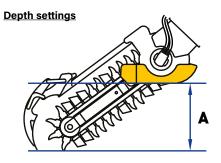
Package consists of: trencher, depth control plate, lateral auger

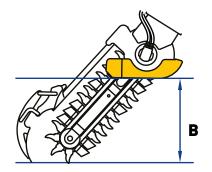
Chain options	
Туре	Description
XHD900-150 Earth	with earth teeth for soft grounds, width 150mm/5.9in
XHD900-200 Earth	with earth teeth for soft grounds, width 200mm//7.8in
XHD900-250 Earth	with earth teeth for soft grounds, width 250mm/9.8in
XHD900-300 Earth	with earth teeth for soft grounds, width 300mm/11.8in
XHD900-350 Earth	with earth teeth for soft grounds, width 350mm/13.7in
XHD900-150 Combi	with earth and tungsten teeth for different grounds, width 150mm/5.9in
XHD900-200 Combi	with earth and tungsten teeth for different grounds, width 200mm/7.8in
XHD900-250 Combi	with earth and tungsten teeth for different grounds, width 250mm/9.8in
XHD900-300 Combi	with earth and tungsten teeth for different grounds, width 300mm/11.8in
XHD900-350 Combi	with earth and tungsten teeth for different grounds, width 350mm/13.7in
XHD900-150 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 150mm/5.9in
XHD900-200 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 200mm/7.8in
XHD900-250 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 250mm/9.8in
XHD900-300 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 300mm/11.8in
XHD900-350 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 350mm/13.7in
XHD1200-150 Earth	with earth teeth for soft grounds, width 150mm/5.9in
XHD1200-200 Earth	with earth teeth for soft grounds, width 200mm/7.8in
XHD1200-250 Earth	with earth teeth for soft grounds, width 250mm/9.8in
XHD1200-300 Earth	with earth teeth for soft grounds, width 300mm/11.8in
XHD1200-150 Combi	with earth and tungsten teeth for different grounds, width 150mm/5.9in
XHD1200-200 Combi	with earth and tungsten teeth for different grounds, width 200mm/7.8in
XHD1200-250 Combi	with earth and tungsten teeth for different grounds, width 250mm/9.8in
XHD1200-300 Combi	with earth and tungsten teeth for different grounds, width 300mm/11.8in
XHD1200-150 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 150mm/5.9in
XHD1200-200 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 200mm/7.8in
XHD1200-250 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 250mm/9.8in
XHD1200-300 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 300mm/11.8in
XHD1500-150 Earth	with earth teeth for soft grounds, width 150mm/5.9in
XHD1500-200 Earth XHD1500-150 Combi	with earth teeth for soft grounds, width 200mm/7.8in
XHD1500-150 Combi	with earth and tungsten teeth for different grounds, width 150mm/5.9in with earth and tungsten teeth for different grounds, width 200mm/7.8in
XHD1500-200 Combi	with tungsten teeth for asphalt and frozen grounds, width 150mm/5.9in
XHD1500-150 Tungsten	with tungsten teeth for asphalt and frozen grounds, width 200mm/7.8in
And 1900-200 Tuligstell	with tungsten teeth for asphalt and hozen grounds, width 200mm/7.6m

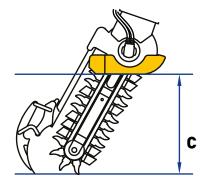
Technical data			
	XHD900	XHD1200	XHD1500
Hydraulic pressure:	72000	111111111111111111111111111111111111111	180 - 240 bar / 2,610 - 3,480 psi
Oil flow:		70 - 115 l/min / 18.5 - 30.3 GPM	

# **Info and Mounting Options for Trenchers**

# Depth options and chains







**Chain options** 







Tranch	Operat	Operating weight excavator			Skid steer loader - low flow			Skid steer loader - high flow		
Trench depth	2-2.5 t 4,400-5,500lbs	2.5-3 t 5,500-6,600lbs	3-3.5 t 6,600-7,700lbs	3.6-4 t 7,920-8,800lbs	4-4.5 t 8,800-9,900lbs	4.5-5 t 9,900-11,000lbs	5-6 t 11,000-13,200lbs	6-7 t 13,200-15,400lbs	7-10 t 15,400-22,000lbs	
600mm 23.6in	MT600	MT600	MT600	MT600	MT600					
900mm 35.4in			MT900	MT900	MT900*	MT900*	XHD900-2K	XHD900-2K	XHD900-4K	
1,200mm							XHD1200-2K	XHD1200-2K	XHD1200-2K	
47.2in							Andizou-zk	XHD1200-4K	AHDI200-2K	
1,500mm 59in								XHD1500-4K	XHD1500-4K	

<sup>\*</sup> here 2K-motor required - on request

#### Adapters for rigid mount on excavators



Туре	for trenchers	Pin Ø (mm/in)	Operating weight (t/lbs)
KM 690-MT-30	MT600 / MT900	30 / 1.18	2.5 - 4.5 / 5,500 - 9,900 3 - 7 / 6,600 - 15,400
KM 690-MT-35	MT600 / MT900	35 / 1.38	2.5 - 4.5 / 5,500 - 9,900 3 - 7 / 6,600 - 15,400
KM 690-MT-38	MT600 / MT900	38 / 1.49	2.5 - 4.5 / 5,500 - 9,900 3 - 7 / 6,600 - 15,400
KM 690-MT-40	MT600 / MT900	40 / 1.57	2.5 - 4.5 / 5,500 - 9,900 3 - 7 / 6,600 - 15,400
KM 690-MT-45	MT600 / MT900	45 / 1.77	2.5 - 4.5 / 5,500 - 9,900 3 - 7 / 6,600 - 15,400
KM 690-XHD-40	XHD900 / XHD1200 / XHD1500	40 / 1.57	5 - 7.5 / 11,000 - 16,500 5 - 10 / 11,000 - 22,000
KM 690-XHD-45	XHD900 / XHD1200 / XHD1500	45 / 1.77	5 - 7.5 / 11,000 - 16,500 5 - 10 / 11,000 - 22,000
KM 690-XHD-50	XHD900 / XHD1200 / XHD1500	50 / 1.97	5 - 7.5 / 11,000 - 16,500 5 - 10 / 11,000 - 22,000
KM 690-XHD-55	XHD900 / XHD1200 / XHD1500	55 / 2.17	5 - 7.5 / 11,000 - 16,500 5 - 10 / 11,000 - 22,000
KM 690-XHD-60	XHD900 / XHD1200 / XHD1500	60 / 2.36	5 - 7.5 / 11,000 - 16,500 5 - 10 / 11,000 - 22,000

#### Adapters for system L-Lock



Туре	for trenchers	Operating weight (t/lbs)
KWS03 rigid	MT600 / MT900	2.5 - 4.5 / 5,500 - 9,900 3 - 7 / 6,600 - 15,400
KSW08 rigid	XHD900 / XHD1200 / XHD1500	5 - 7.5 / 11,000 - 16,500 5 - 10 / 11,000 - 22,000

The KSB breaker series, for excavators from 0.5t / 1,100lbs up to 12.5t / 27,500lbs, benefits from a distinctive 'monobloc' design, manufactured in a single piece and without any tie rods – a feature that makes the structure extremely durable and resistant to leverage during operation.

- More force and less vibration and maintenance: inertial nitrogen energy recovery gives more power and less vibration thanks to nitrogen chamber (no internal diaphragms), reducing maintenance costs.
- ▶ Long-lasting nitrogen: traditionally, breakers with nitrogen energy recovery require frequent recharges – but with the new KSB-range's special sealing system, the charge-life can be increased by up to 300%.
- ▶ Protected tubes: tubes are completely protected through the casing and are suitable for all types of excavation, especially in narrow spaces.
- ▶ **Hydraulic system for blank firing:** a regenerative oil circuit that avoids blank firing when the tool is not in contact with the rock.



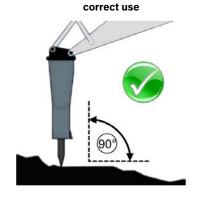
Hydraulic I	Hydraulic Breaker KSB					
Туре	Weight	Diameter tool	Energy	Hits per minute	Height with standard tools	Operating weight
	(kg/lbs)	(mm/in)	(٦)	(/min)	(mm/in)	(t/lbs)
KSB 0	60 / 132	40 / 1.57	250	800 - 1,700	785 / 30.9	0.5 - 1.4 / 1,100 - 3,080
KSB 1	70 / 154	40 / 1.57	280	800 - 1,750	810 / 31.9	0.5 - 1.6 / 1,100 - 3,520
KSB 2	100 / 220	45 / 1.77	400	800 - 2,300	920 / 36.2	1.2 - 2.5 / 2,640 - 5,500
KSB 3	135 / 297	48 / 1.89	580	800 - 2,000	920 / 36.2	1.5 - 3.8 / 3,300 - 8,360
KSB 4	190 / 418	55 / 2.17	750	900 - 1,900	1,145 / 45.1	2.5 - 5 / 5,500 - 11,000
KSB 6	240 / 528	65 / 2.56	950	850 - 1,800	1,170 / 46.1	3 - 6.5 / 6,600 - 14,300
KSB 8	300 / 660	75 / 2.95	1,200	600 - 1,500	1,200 / 47.2	4.5 - 8.5 / 9,900 - 18,700
KSB 10	430 / 946	80 / 3.15	1,700	500 - 1,300	1,515 / 59.6	6 - 10 / 13,200 - 22,000
KSB 12	480 / 1,056	90 / 3.54	2,300	600 - 1,200	1,565 / 61.6	8 - 12.5 / 17,600 - 27,500

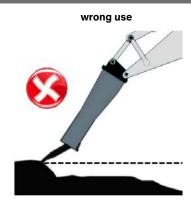
Package consists of: breaker, two standard tools at option (moil, blunt, pyramid, chisel) and nitrogen adapter

_	Dumn consoity				
Туре	Pump capacity (I/min/GPM)	Operating pressure (bar/psi)	Back pressure max. (bar/psi)	Inner diameter breaker flow	Inner diameter breaker return
KSB 0	15 - 30 / 4 - 8	110 / 1,595	30 / 435	1/2"	1/2"
KSB1	13 - 20 / 3.4 - 5	100 / 1,450	30 / 435	1/2"	1/2"
KSB 2	15 - 30 / 4 - 8	110 / 1,595	30 / 435	1/2"	1/2"
KSB 3	18 - 40 / 4.7 - 10.5	110 / 1,595	30 / 435	1/2"	1/2"
KSB 4	25 - 55 / 6.5 - 14.5	130 / 1,885	30 / 435	1/2"	1/2"
KSB 6	30 - 60 / 8 - 16	140 / 2,030	30 / 435	1/2"	1/2"
KSB 8	50 - 70 / 13 - 18.5	160 / 2,320	30 / 435	3/4"	3/4"
KSB 10	75 - 90 / 20 - 24	150 / 2,170	30 / 435	3/4"	3/4"
KSB 12	85 - 110 / 22.5 - 29	150 / 2,170	30 / 435	3/4"	3/4"

Accessories	
Туре	Description
KM 690 2t	adapter for rigid mounting – up to 2t/4,400lbs
KM 690 8t	adapter for rigid mounting – up to 8t/17,600lbs
KM 690 15t	adapter for rigid mounting – up to 15t/33,000lbs
KSW01 rigid	bolt-on adapter for system L-Lock KMS01L/KHS01L for rigid mounting - up to 2t/4,400lbs
KSW03 rigid	bolt-on adapter for system L-Lock KMS03L/KHS03L for rigid mounting – up to 6t/13,200lbs
KSW08 rigid	bolt-on adapter for system L-Lock KMS08L/KHS08L for rigid mounting - up to 12t/26,400lbs
OQ45/2 rigid	bolt-on adapter for OilQuick OQ45 – up to 12t/26,400lbs
•	adapters for quick change systems from other manufacturers or different sizes on request

Use

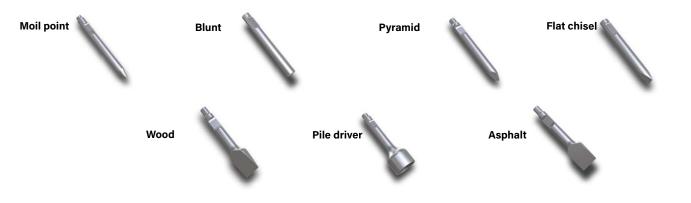




**KSB** 

# **Chisels for Breakers**

Benefit from the large variety of chisels for different tasks.



ype	Suitable for	Diameter	Description
ype	Juitable IUI	Ø (mm/in)	Description
SB 1 Moil point	KSB 0 & KSB 1	40 / 1.57	moil point chisel for concrete, mediumhard and non-layered rock
SB 1 Blunt	KSB 0 & KSB 1	40 / 1.57	blunt chisel for reinforced concrete and highly compact rock
SB 1 Pyramid	KSB 0 & KSB 1	40 / 1.57	pyramid chisel for reinforced concrete and highly compact rock
SB 1 Flat chisel	KSB 0 & KSB 1	40 / 1.57	flat chisel for medium-hard and layered rock
SB 1 Wood	KSB 0 & KSB 1	40 / 1.57	wood cutter chisel for cutting all types of wood
SB 1 Pile driver*	KSB 0 & KSB 1	40 / 1.57	pile driver chisel for planting wooden or concrete poles and posts
(SB 1 Asphalt**	KSB 0 & KSB 1	40 / 1.57	asphalt cutter chisel for cutting asphalt
(SB 2 Moil point	KSB 2	45 / 1.77	moil point chisel for concrete, mediumhard and non-layered rock
(SB 2 Blunt	KSB 2	45 / 1.77	blunt chisel for reinforced concrete and highly compact rock
SB 2 Pyramid	KSB 2	45 / 1.77	pyramid chisel for reinforced concrete and highly compact rock
(SB 2 Flat chisel	KSB 2	45 / 1.77	flat chisel for medium-hard and layered rock
SB 2 Wood	KSB 2	45 / 1.77	wood cutter chisel for cutting all types of wood
(SB 2 Pile driver*	KSB 2	45 / 1.77	pile driver chisel for planting wooden or concrete poles and posts
(SB 2 Asphalt**	KSB 2	45 / 1.77	asphalt cutter chisel for cutting asphalt
SB 3 Moil point	KSB 3	48 / 1.89	moil point chisel for concrete, mediumhard and non-layered rock
(SB 3 Blunt	KSB 3	48 / 1.89	blunt chisel for reinforced concrete and highly compact rock
(SB 3 Pyramid	KSB 3	48 / 1.89	pyramid chisel for reinforced concrete and highly compact rock
(SB 3 Flat chisel	KSB 3	48 / 1.89	flat chisel for medium-hard and layered rock
(SB 3 Wood	KSB 3	48 / 1.89	wood cutter chisel for cutting all types of wood
(SB 3 Pile driver*	KSB 3	48 / 1.89	pile driver chisel for planting wooden or concrete poles and posts
(SB 3 Asphalt**	KSB 3	48 / 1.89	asphalt cutter chisel for cutting asphalt
(SB 4 Moil point	KSB 4	55 / 2.17	moil point chisel for concrete, mediumhard and non-layered rock
(SB 4 Blunt	KSB 4	55 / 2.17	blunt chisel for reinforced concrete and highly compact rock
(SB 4 Pyramid	KSB 4	55 / 2.17	pyramid chisel for reinforced concrete and highly compact rock
(SB 4 Flat chisel	KSB 4	55 / 2.17	flat chisel for medium-hard and layered rock
(SB 4 Wood	KSB 4	55 / 2.17	wood cutter chisel for cutting all types of wood
(SB 4 Pile driver*	KSB 4	55 / 2.17	pile driver chisel for planting wooden or concrete poles and posts
(SB 4 Asphalt**	KSB 4	55 / 2.17	asphalt cutter chisel for cutting asphalt
(SB 6 Moil point	KSB 6	65 / 2.56	moil point chisel for concrete, mediumhard and non-layered rock
(SB 6 Blunt	KSB 6	65 / 2.56	blunt chisel for reinforced concrete and highly compact rock
(SB 6 Pyramid	KSB 6	65 / 2.56	pyramid chisel for reinforced concrete and highly compact rock
(SB 6 Flat chisel	KSB 6	65 / 2.56	flat chisel for medium-hard and layered rock
(SB 6 Wood	KSB 6	65 / 2.56	wood cutter chisel for cutting all types of wood
(SB 6 Pile driver*	KSB 6	65 / 2.56	pile driver chisel for planting wooden or concrete poles and posts
(SB 6 Asphalt**	KSB 6	65 / 2.56	asphalt cutter chisel for cutting asphalt
(SB 8 Moil point	KSB 8	75 / 2.95	moil point chisel for concrete, mediumhard and non-layered rock
(SB 8 Blunt	KSB 8	75 / 2.95	blunt chisel for reinforced concrete and highly compact rock
(SB 8 Pyramid	KSB 8	75 / 2.95	pyramid chisel for reinforced concrete and highly compact rock
(SB 8 Flat chisel	KSB 8	75 / 2.95	flat chisel for medium-hard and layered rock
(SB 8 Wood	KSB 8	75 / 2.95	wood cutter chisel for cutting all types of wood
(SB 8 Pile driver*	KSB 8	75 / 2.95	pile driver chisel for planting wooden or concrete poles and posts
(SB 8 Asphalt**	KSB 8	75 / 2.95	asphalt cutter chisel for cutting asphalt
(SB 10 Moil point	KSB 10	80 / 3.15	moil point chisel for concrete, mediumhard and non-layered rock
(SB 10 Blunt	KSB 10	80 / 3.15	blunt chisel for reinforced concrete and highly compact rock
(SB 10 Pyramid	KSB 10	80 / 3.15	pyramid chisel for reinforced concrete and highly compact rock
SB 10 Flat chisel	KSB 10	80 / 3.15	flat chisel for medium-hard and layered rock
SB 10 Wood	KSB 10	80 / 3.15	wood cutter chisel for cutting all types of wood
SB 10 Pile driver*	KSB 10	80 / 3.15	pile driver chisel for planting wooden or concrete poles and posts
(SB 10 Asphalt**	KSB 10	80 / 3.15	asphalt cutter chisel for cutting asphalt
SB 12 Moil point	KSB 12	90 / 3.54	moil point chisel for concrete, mediumhard and non-layered rock
(SB 12 Blunt	KSB 12	90 / 3.54	blunt chisel for reinforced concrete and highly compact rock
(SB 12 Pyramid	KSB 12	90 / 3.54	pyramid chisel for reinforced concrete and highly compact rock
(SB 12 Flat chisel	KSB 12	90 / 3.54	flat chisel for medium-hard and layered rock
(SB 12 Wood	KSB 12	90 / 3.54	wood cutter chisel for cutting all types of wood
KSB 12 Pile driver*	KSB 12	90 / 3.54	pile driver chisel for planting wooden or concrete poles and posts
KSB 12 Asphalt**	KSB 12	90 / 3.54	asphalt cutter chisel for cutting asphalt

<sup>\*</sup> Please state inner diameter when ordering. Prices differ depending on diameter! \*\* Please state blade width when ordering. Prices differ depending on width!

# **Mounting Options for Hydraulic Attachments - rigid mount**

#### KM 690 - adapter for rigid mount



Туре	Operating weight (t/lbs)	
KM 690 2t	up to 2 / 4,400	
KM 690 8t	up to 8 / 17,600	
KM 690 15t	up to 15 / 33,000	

#### KM 691 – adapter for specific solutions

Type Operating weight (t/lbs)

KM 691 2t up to 2 / 4,400

KM 691 8t up to 8 / 17,600



#### KSW rigid - bolt-on adapter for quick coupler system L-Lock

 Type
 for quick coupler System L-Lock
 Operating weight (t/lbs)

 KSW01 rigid
 KMS01L / KHS01L
 up to 2 / 4,400

 KSW03 rigid
 KMS03L / KHS03L
 up to 6 / 13,200

 KSW08 rigid
 KMS08L / KHS08L
 up to 12t / 26,400



S rigid - bolt-on adapter for quantum series of the series	uick coupler syste	em S-Lock	
	Туре	for quick coupler System S-Lock	Operating weight (t/lbs)
	S40 rigid	KMS40S / KHS40S	up to 6 / 13,200
	S45 rigid	KMS45S / KHS45S	up to 11 / 24,200
	S50 rigid	KMS50S / KHS50S	up to 11 / 24,200

Note: adapters for quick change systems for other manufacturers or other sizes on request

# **Mounting Options for Hydraulic Attachments - rigid mount**

#### OQ - bolt-on adapter for system "Oilquick" incl. hoses



Туре	For attachments	Operating weight (t/lbs)
OQ40/2 rigid	breakers	1 - 5 / 2,200 - 11,000
OQ40/4 rigid	grabs, shears	1 - 5 / 2,200 - 11,000
OQ45/2 rigid	breakers	5 - 12 / 11,000 - 26,400
OQ45/4 rigid	grabs, shears	5 - 12 / 11,000 - 26,400
OQ45-5/2 rigid	breakers	5 - 12 / 11,000 - 26,400
OQ45-5/3 rigid	compactors, planers	5 - 12 / 11,000 - 26,400
OQ45-5/4 rigid	grabs, shears	5 - 12 / 11,000 - 26,400
OQ60/2 rigid	breakers	8 - 15 / 17,600 - 33,000
OQ60/4 rigid	grabs, shears	8 - 15 / 17,600 - 33,000
OQ60-5/2 rigid	breakers	8 - 15 / 17,600 - 33,000
OQ60-5/3 rigid	compactors, planers	8 - 15 / 17,600 - 33,000
OQ60-5/4 rigid	grabs, shears	8 - 15 / 17,600 - 33,000

#### SW - bolt-on adapter for system "Liebherr"



Туре	Operating weight (t/lbs)
SW33 rigid	8 - 18 / 17,600 - 39,600
SW33 Likufix rigid*	8 - 18 / 17,600 - 39,600

\*incl. hoses

#### CW – bolt-on adapter for system "Verachtert"



Туре	Operating weight (t/lbs)
CW00 rigid	up to 1 / 2,200
CW05 rigid	up to 3.5 / 7,700
CW10 rigid	3.5 - 10.5 / 7,700 - 23,100
CW20 rigid	7.5 - 15 / 16,500 - 33,000
CW20S rigid**	7.5 - 15 / 16,500 - 33,000

\*\*smaller S-version

Note: adapters for quick change systems for other manufacturers or other sizes on request

## KINSHOFER Rotators

**KINSHOFER** is a manufacturer of rotators for excavators, truck loaders and logging operations. Many years of experience in designing rotators and hydraulic load handling equipment allow the production of very efficient and long lasting rotators, specially tailored to each operational requirement.

- ▶ Wide range: depending on the usage and carrier unit the load capacity, up to 15t/33000lbs and the design a rotator with flange or with shaft is possible to use.
- ▶ "Gear-type"-design: ensures very compact and powerful rotators. Precise control of approach and stop even at a high oil temperature.
- ▶ Endless rotation with integrated oil ducts for one hydraulic circuit as standard; rotators with four oil passages are also available.
- ➤ The pressure relief valve allows the rotator independence from the hydraulic system of the excavator and prevents overstressing.
- ▶ Safe admission of pressure, move and bending load through big dimensioned roller bearings.
- ▶ Minimization of abrasion: by using high quality tempered steel, the outer surface is hardened through a nitrate-coating.



Product Range Rotators								
Туре	Load capacity	Upper connection	Torque	Bending moment	•	raulic ections	Weight	
		(width x pin-Ø)		max.	rotator	grab		
	(kg/lbs)	(mm/in)	(Nm/ft.lbs)	(Nm/ft.lbs)			(kg/lbs)	
KM 04 F	4,500 / 9,900	84 x 30 / 3.3 x 1.1	850 / 626	3,000 / 2,212	M18x1,5	M18x1,5	26 / 57.2	
KM 04 F140-30USE	4,500 / 9,900	84 x 30 / 3.3 x 1.1	1,000 / 737	8,500 / 6,268	M18x1,5	M18x1,5	31 / 68.2	
KM 04 F140-30VE	4,500 / 9,900	84 x 30 / 3.3 x 1.1	850 / 626	3,000 / 2,212	M18x1,5	M18x1,5	26 / 57.2	
KM 06 F140-40	6,000 / 13,200	84 x 40 / 3.3 x 1.5	1,000 / 737	8,500 / 6,268	G 1/2"	G 1/2"	34 / 74.8	
KM 07 F180-40	7,000 / 15,400	84 x 40 / 3.3 x 1.5	2,000 / 1,475	15,000 / 11,062	G 1/2"	M 27x2	76 / 167.2	
KM 10 F173-45E	10,000 / 22,000	100 x 45 / 3.9 x 1.7	2,000 / 1,475	12,000 / 8,850	G 1/2"	G 1/2"	65 / 143	
KM 10 F180-50	10,000 / 22,000	110 x 50 / 4.3 x 1.9	2.000 / 1475	15,000 / 11,062	G 1/2"	M 27x2	78 / 171.6	

Product Range Rotate	ors Without Head Plat	es				
Туре	Load capacity (kg/lbs)	<b>Torque</b> (Nm/ft.lbs)	Bending moment max. (Nm/ft.lbs)	Hydraulic o	onnections grab	Weight (kg/lbs)
KM 04 F140/150	4,500 / 9,900	850 / 626	3,000 / 2,212	M18x1,5	M18x1,5	34 / 74.8
KM 06 F 140/180	6,000 / 13,200	1,000 / 737	8,500 / 6,268	G 1/2"	G 1/2"	38 / 83.6
KM 06 F173/180	6,000 / 13,200	1,000 / 737	8,500 / 6,268	G 1/2"	G 1/2"	34 / 74.8
KM 07 F275/180	7,000 / 15,400	2,000 / 1,475	14,000 / 10,325	G 1/2"	G 3/4"	73 / 160.6
KM 10 F173/180	10,000 / 22,000	2,000 / 1,475	12,000 / 8,850	G 1/2"	M27x2	60 / 13.2
KM 10 F214/180	10,000 / 22,000	1,000 / 737	12,000 / 8,850	G 1/2"	G 1/2"	44 / 96.8
KM 10 F275/180V	10,000 / 22,000	2,000 / 1,475	14,000 / 10,325	G 1/2"	G 3/4"	73 / 160.6
KM 15 F340/220	15,000 / 33,000	3,000 / 2,212	25,000 / 18,437	G 1/2"	G 3/4"	160 / 352
KM 15 F273/273	15,000 / 33,000	2,000 / 1,475	50,000 / 36,875	G 1/2"	G 3/4"	71 / 156.2

Head Plates for Rotators							
Туре	for rotators	Load capacity (kg/lbs)	Eye width (mm/in)	Pin diameter (mm/in)			
KM 692 4t-6t 30	KM 04 F140/150	4,500 / 9,900	84 / 3.3	30 / 1.1			
KM 692 4t-6t 40	KM 06 F173/180	6,000 / 13,200	84 / 3.3	40 / 1.5			
KM 692 7t-10t 40	KM 07 F275/180	7,000 / 15,400	84 / 3.3	40 / 1.5			
KM 692 7t-10t 50	KM 10 F173/180 - KM 10 F275/180V	10,000 / 22,000	110 / 4.3	50 / 1.9			
KM 692 7t-10t 60	KM 10 F173/180 - KM 10 F275/180V	10,000 / 22,000	125 / 4.9	60 / 2.3			
KM 692 15t 70 273	KM 15 F273/273	15,000 / 33,000	180 / 7	70 / 2.7			
KM 692 15t 70 340	KM 15 F340/220	15,000 / 33,000	180 / 7	70 / 2.7			













KM 04 F KM 04 F USE

KM 06 F140-40

KM 10 F214/180

KM 10 F275-50

KM 15 F273/273

# CONTACT



#### KINSHOFER Branches

Hauptsitz Deutschland:

KINSHOFER GmbH Raiffeisenstrasse 12 83607 Holzkirchen Tel.: +49 (0) 8021 88 99 0 Email: info@kinshofer.com www.kinshofer.com

Canada:

KINSHOFER North America
5040 Mainway Drive, Unit #11
Burlington, ON L7L 7G5
Tel.: +1 (905) 335-2856
Fax: +1 (905) 335-4529

Email: sales-northamerica@kinshofer.com www.kinshofer.com

# United Kingdom: KINSHOFER UK Ltd. Shipton Downs Farm Hazleton

Cheltenham, Gloucestershire, GL54 4DX

Tel.: +44 (0) 161 406 7046 Fax: +44 (0) 161 406 7014 Email: sales-uk@kinshofer.com

**RF System AB** 

Furutorpsgatan 6

SE-288 34 Vinslöv

www.rf-system.se

Tel.: +46 (0) 44 817 07

Fax: +46 (0) 44 859 63

Email: info@rf-system.se

KINSHOFER France S.A.R.L. 8 Bis, rue Gabriel Voisin, CS 40003 F-51688 Reims Cedex 2 Tel.: +33 (0) 3 88 39 55 00 Fax: +33 (0) 3 88 79 06 75 Email: sales-france@kinshofer.com www.kinshofer.com

# United States of America: **KINSHOFER** USA 6420 Inducon Drive

Sanborn, NY, 14132 Tel.: +1 (716) 731-4333 Toll Free (North America): 1-800-268-9525 Email: sales-usa@kinshofer.com www.kinshofer.com

ISO 9001 certified Company. DVS ZERT is a registred trademark of DVS ZERT\* e.V., Düsseldorf.

#### **KINSHOFER** Subsidiaries

#### Nederland: **DEMAREC B.V.**

De Hork 32 NL-5431 NS Cuijk Tel.: +31 (0) 485 442300 Fax: +31 (0) 485 442120 info@demarec.com

www.demarec.com

#### Australia:

#### Auger Torque Australia Pty Ltd.

481 Boundary Road, Darra Queensland 4076 Tel.: +61 (0) 7 3274 2077 Fax: +61 (0) 7 3274 5077 Email: sales@augertorque.com.au www.augertorque.com.au

#### **United States of America:** Solesbee's LLC

2640 Jason Industrial Parkway Winston, GA 30187

Toll Free (North America): 1-800-419-8090

Email: sales@solesbees.com www.solesbees.com

Auger Torque China CO., Ltd.

Annerley (Brisbane) QLD, 4103

Email: sales@dohertydirect.net

Tel.: +61 1 800 057 021

www.dohertydirect.net

Baozhan Rd, Tongyi Industry Zone Dongwu, Yinzhou, Ningbo

China 315114

Tel.: + 86 (0) 574 8848 8181 Fax: + 86 (0) 574 8848 8687

Email: john.hu@attachmenttorque.com

**Doherty Couplers & Attachments Ltd.** 

www.augertorque.com

# Trevi Benne S.p.A.

Via Bergoncino, 18 IT-36025 Noventa Vicentina VI Tel.: +39 0444 760773 Fax: +39 0444 861182 Email: info@trevibenne.it www.trevibenne.it

## **United Kingdom:**

#### **Auger Torque Europe Limited**

Hazleton Cheltenham, GL54 4DX

Tel.: +44 (0) 1451 861 652 Fax: +44 (0) 1451 861 660 Email: sales@augertorque.com www.augertorque.com

#### New Zealand:

#### **Doherty Engineered Attachments Ltd.**

PO Box 9339, Greerton Tauranga 3142 Tel.: +64 7 574 3000 Fax: +64 7 574 8030

Email: sales@dohertydirect.net www.dohertydirect.net

#### Italia:

#### Hammer S.r.l.

Via Oleifici dell' Italia Meridionale, lotto G1

IT-70056 Molfetta BA Tel.: +39 080 337 5317

Email: info@hammereurope.com www.hammereurope.com

#### **United Kingdom:**

# **Prolec**

25 Benson Road, Nuffield Industrial Estate Poole, BH17 0GB Tel.: +44 1202 441 000 Email: enquiries@prolec.co.uk

prolec.co.uk

# Cangini Benne S.r.l.

Via Savio, 29/31 47027 IT-70056 Sarsina FC Tel.: +39 0547 698020 Fax: +39 0547 698021

Email: cangini@canginibenne.com

www.canginibenne.com

#### Deutschland:

#### Hydraulikgreifer-Technologie GmbH

Handorfer Weg 19 31241 Ilsede

Tel.: +49 (0) 5172 41 00 90 Email: info@hgt-greifer.de www.hgt-greifer.de

