R-6805 v5.3 EC380EL 18m Long Reach

# **CEES PRODUCT INFORMATION**

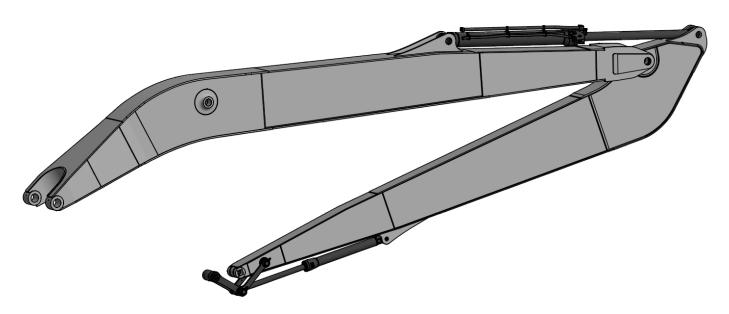
# EC380EL 18m Long Reach





Authorized Solutions Partner for VOLVO CONSTRUCTION EQUIPMENT

EC380EL 18m Long Reach



**Bucket interface: EC220E** 

#### EC380E 18m LR

CEES Long Reach equipment for Volvo machines is robustly constructed and adapted to European requirements and conditions. The units are built around Volvo's original bearings and hydraulic components to ensure availability of spare parts and service from Volvo's dealers. The unit shown above is the new EC380E 18,0m LR and is manufactured in its entirety directly from the raw material.

#### Intended application long reach

Dredging and maintenance of waterways.

River bank maintenance and stabilization.

Highway landscaping and sloping.

Slurry pond maintenance.

Dredging of bridge foundations.

#### Limitations stated

Super long front attachment is designed for "Light duty work" only. Heavy hoist and heavy excavating may result in e.g. high side loads that will damage the machine.

Warranty void if product not used according to instructions and / or not properly maintained!

EC380EL 18m Long Reach









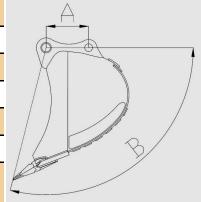
EC380EL 18m Long Reach

#### **EC380EL Long Reach**

		EC380EL LR	
HYDRAULIC CYLINDERS	Unit	18m	
Mono boom (2x)			
Bore x Stroke	ø x mm	160 x 1 530	
Arm (2x)			
Bore x Stroke	ø x mm	175 x 1 700	
Bucket (2x)			
Bore x Stroke	ø x mm	120 x 1 065	

#### MAXIMUM PERMITTED BUCKETS (Direct fit) EC380EL LR (Cwg 6700 kg + 2500kg)

		EC380EL LR
		18m
Bucket interface	Unit	EC220E
Max. bucket capacity	litres	860
Max. bucket weight	Kg	860
Density	t/m³	1,7
Max. bucket radius	mm	1500
Cutting width (max)	mm	1600
Distance between the bucket pins <b>(A)</b>	mm	500
Bucket angle (B)	Q	103



#### NOTE!

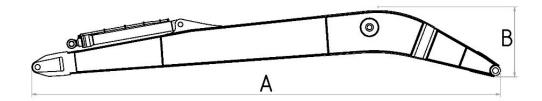
If Quick Fit attachment is used, the bucket size has to be reduced to the corresponding weight of quick fit according to table above. Warranty void if heavier weight than table above is used. Please contact CEES for a

#### MACHINE WEIGHT AND GROUND PRESSURE EC380EL LR (CWG 6 700 + 2 500kg)

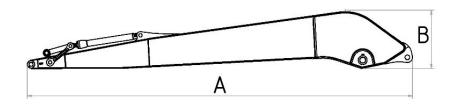
		•	<u> </u>
		EC380EL LR	
	Unit	18m	
Shoe	mm	600	
Operating weight	Kg	43 830	
Ground pressure	kPa	685	
Overall width	mm	3 440	_

EC380EL 18m Long Reach

#### **DIMENSIONS BOOM AND ARM**



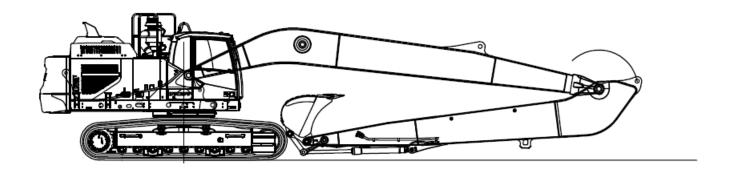
EC380E		LR 18m
Boom	m	10.30
A Length	mm	10 520
B Height	mm	1 600
Width	mm	820
Weight	kg	5 200



EC380E		LR 18m
Arm	m	7.45
A Length	mm	8 580
B Height	mm	1 350
Width	mm	560
Weight	kg	2 760

EC380EL 18m Long Reach

#### **DIMENSIONS BASE MACHINE**

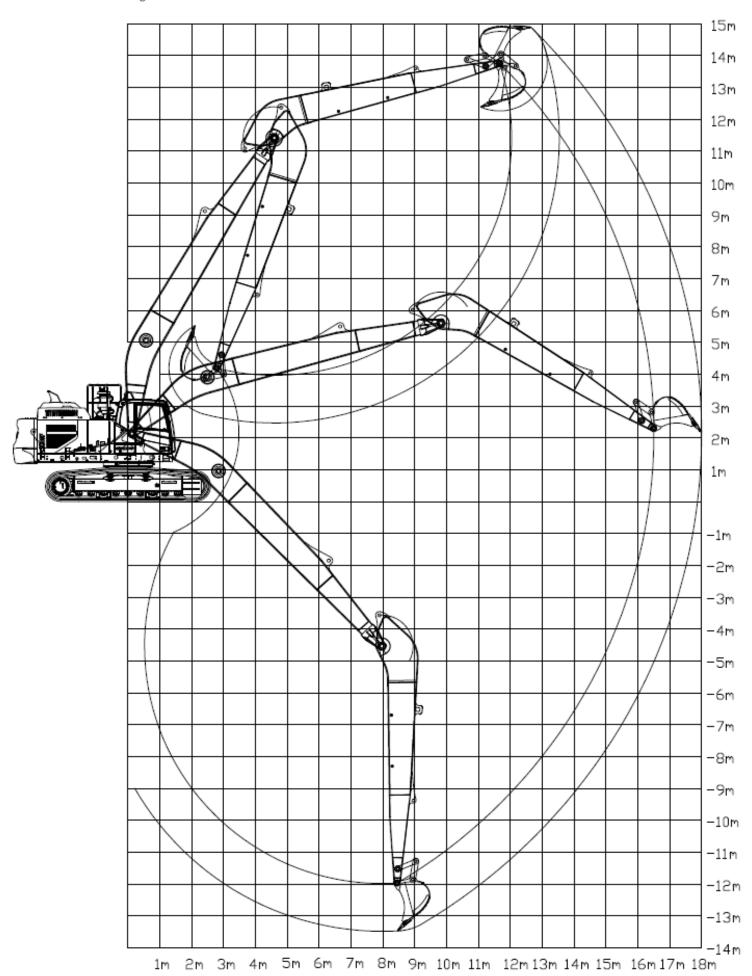


#### EC380E LR

DESCRIPTION	Unit	18m
Boom	m	10.30
Arm	m	7.45
Overall width of upper structure	mm	2 990
Overall width	mm	3 440
Overall height of cab	mm	3 220
Tail slew radius	mm	3 600
Overall height of exhaust pipe	mm	3 465
Counterweight clearance*	mm	1 150
Tumbler length	mm	4 240
Track length	mm	5 180
Track gauge	mm	2 740
Shoe width	mm	600
Min. ground clearance*	mm	500
Overall length	mm	15 100
Overall height of boom	mm	3 500

<sup>\*</sup> Without shoe grouser

EC380EL 18m Long Reach



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#### **WORKING RANGES**

Description	Unit	EC380 ELR 18m
Boom	m	10.30
Arm	m	7.45
A. Max. digging reach	mm	18 000
B. Max. digging reach on ground	mm	17 870
C. Max. digging depth	mm	13 500
D. Max. digging depth (I. 2,44m level)	mm	13 300
E. Max. vertical wall digging depth	mm	9 000
F. Max. cutting height	mm	14 900
G. Max. dumping height	mm	12 200
H. Min. front swing radius	mm	5 700

## Digging forces with direct fit bucket

			Unit	EC380 ELR 18m
Bucket radius			mm	1 500
	Normal	SAE J1179	kN	118
Breakout force - bucket	Power boost	SAE J1179	kN	NA
breakout force - bucket	Normal	ISO 6015	kN	133
	Power boost	ISO 6015	kN	NA
	Normal	SAE J1179	kN	87
Tearout force - dipper arm	Power boost	SAE J1179	kN	NA
	Normal	ISO 6015	kN	90
	Power boost	ISO 6015	kN	NA
Rotation angle, bucket			o	162

EC380EL 18m Long Reach

## Lifting capacity EC380E 18m LR Across undercarriage

Shoes: 600mm

Std. Counteweight: 6700 kg

Additional counterweight: 2500 kg

Bucket pin		Load distance from machine center (m)							Max load (kg) /	
Height(m)	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	Max reach(m)
10.5	0	0	0	0	0	0	3880*	3160*	0	2570* / 14.0
9.0	0	0	0	0	0	0	3960*	3810	0	2560* / 14.8
7.5	0	0	0	0	0	0	4130*	3690	2900	2610* / 15.4
6.0	0	0	0	0	0	4710*	4360*	3530	2800	2420 / 15.9
4.5	0	0	0	6670*	5750*	5100*	4180	3340	2670	2230 / 16.2
3.0	0	13610*	9670*	7620*	6210	4880	3890	3140	2540	2100 / 16.3
1.5	0	8570*	9660	7230	5620	4470	3610	2940	2400	2010 / 16.3
0.0	3640*	7190*	8660	6530	5130	4120	3360	2760	2270	1950 / 16.2
-1.5	4910*	7560*	8070	6040	4750	3840	3150	2600	2170	1950 / 15.9
-3.0	6240*	8560*	7780	5750	4500	3640	2990	2490	2100	1990 / 15.5
-4.5	7640*	9900*	7700	5610	4360	3520	2900	2430	0	2100 / 14.9
-6.0	9160*	11520*	7750	5590	4320	3480	2870	2430	0	2270 / 14.2
-7.5	10820*	12520	7930	5690	4370	3520	2920	0	0	2580 / 13.2
-9.0	12680*	12510*	8220	5880	4520	3650	0	0	0	3100 / 11.9
-10.5	0	10220*	8360*	6200	4790	0	0	0	0	4000 / 10.3
-12.0	0	0	0	4960*	0	0	0	0	0	4550* / 8.1

#### **EXPLANATION OF LIFTING CAPACITY TABLES**

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

#### Notes:

- 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities.
- 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
- 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
- 4. Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.

EC380EL 18m Long Reach

#### Lifting capacity EC380E 18m LR Along undercarriage

Shoes: 600mm

Std. Counteweight: 6700 kg

Additional counterweight: 2500 kg

Bucket pin	Load distance from machine center (m)						Max load (kg)/			
Height(m)	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	Max reach(m)
10.5	0	0	0	0	0	0	3880*	3160*	0	2570* / 14.0
9.0	0	0	0	0	0	0	3960*	3840*	0	2560* / 14.8
7.5	0	0	0	0	0	0	4130*	3940*	3180*	2610* / 15.4
6.0	0	0	0	0	0	4710*	4360*	4090*	3860*	2570* / 15.9
4.5	0	0	0	6670*	5750*	5100*	4630*	4280*	4010*	2650* / 16.2
3.0	0	13610*	9670*	7620*	6360*	5530*	4930*	4480*	4140*	2880* / 16.3
1.5	0	8570*	11060*	8500*	6960*	5940*	5220*	4680*	4280*	3080* / 16.3
0.0	3640*	7190*	12040*	9210*	7460*	6300*	5480*	4870*	4270	3260* / 16.2
-1.5	4910*	7560*	12550*	9680*	7830*	6580*	5680*	4880	4170	3650* / 15.9
-3.0	6240*	8560*	12670*	9900*	8040*	6750*	5640	4770	4090	3900 / 15.5
-4.5	7640*	9900*	12460*	9870*	8080*	6670	5540	4700	0	4110 / 14.9
-6.0	9160*	11520*	11970*	9600*	7920*	6620	5510	4700	0	4400 / 14.2
-7.5	10820*	13440*	11170*	9070*	7530*	6340*	5370*	0	0	4670* / 13.2
-9.0	12680*	12510*	10000*	8220*	6850*	5740*	0	0	0	4800* / 11.9
-10.5	0	10220*	8360*	6940*	5750*	0	0	0	0	4810* / 10.3
-12.0	0	0	0	4960*	0	0	0	0	0	4550* / 8.1

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Lifting capacity at the arm end without bucket.

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EC380EL 18m Long Reach R-6805 v5.3

#### How to order the base machine

To ensure accurate machine configuration and efficient logistics, coordinate all special applications solutions activities with your Regional Sales Support representative.

## Base machine ordered by dealer via MOM

Volvo CE standard machines are ordered from Volvo CE via the normal Master Order Management System.

#### Volvo Base Machine Configuration for CE Engineering Solutions AB Long Reach:

- EC380EL should be ordered **without** monoblock boom and dipper arm with delivery to the Volvo Hub in Rotterdam (Van der Vlist)
- Base machine should have boom cylinders and pin for boom foot.
- Equipped with the 6 700kg counterweight and 700mm track shoes.
- With X1, X3 circuit and Quick Fit hydraulics.

## How to order the Long Reach

# The Long Reach is ordered by dealer to authorized partner CE Engineering Solutions AB

The LR kit should be ordered to CE Engineering Solutions AB and will be invoiced at the delivery from Korea (Changwon).

CEES Art. No:	Item Description:
10-33580	EC380E Long Reach 18m incl. X1, X3, QF routings and 2500kg CWT

Options	
10-48491	Automatic lubrication for 18m Long Reach
10-49105	Protection for X1 pipes
10-49146	Water protection kit for 18m Long Reach

## Logistics

# Transport and assembly is ordered by dealer to Van der Vlist

- The transport of the container with LR kit should be ordered by the Volvo dealer directly to Van der Vlist (Volvo shipping agent) 18m LR in a 40ft open top container and will be invoiced directly to the Volvo dealer.
- The assembly of the LR on the EC380EL base machine should be ordered by the Volvo dealer directly to Van der Vlist and will be invoiced directly to the Volvo dealer.
- Transport of assembled Long Reach machine from Volvo hub to the end destination will be organized and offered by Volvo logistics.
- Depending on customer request, the LR can be sent as a kit to any requested destination, please contact CE Engineering Solutions AB.

CEES assist in coordinating the transport with Van der Vlist.

## Configuration



#### 10-33580 EC380E 18m Long Reach

Including X1, X3, QF routings and 2500 kg CWT.



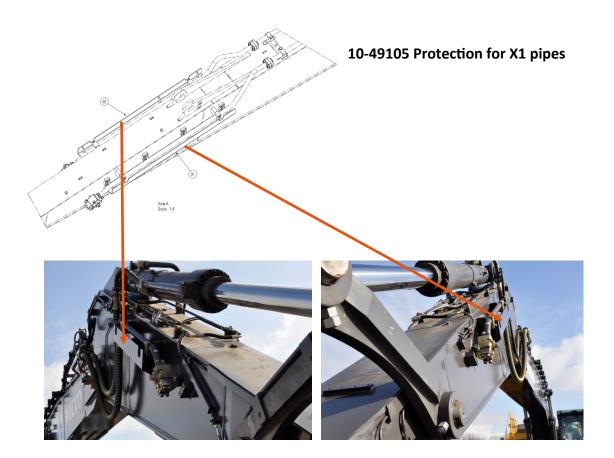


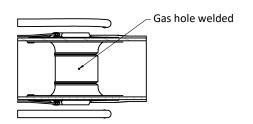


#### 10-48491 Automatic lubrication

#### **Specification:**

- Linkage prepared for automatic lubrication.
- Lubrication lines on boom and arm similar to the factory option but longer to fit the Long Reach.
- Protection plates on dipper arm over grease lines.



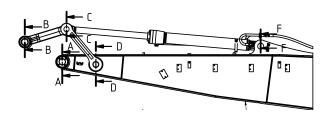


#### 10-49146

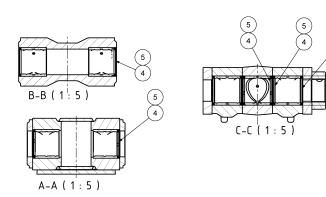
#### Water protection kit

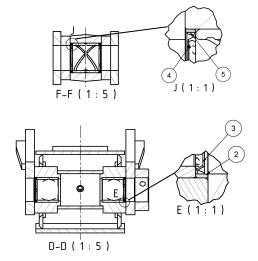
The arm is sealed to prevent water from reaching the inner parts when working in water areas.

- The original rings are replaced with improved rings.
- The "gas hole" is welded.



2	Intermediate ring	
3	Scraper ring	70x80x7
4	Scraper ring	80x95x7
5	Intermediate ring	90x95x7,3





## We make machines more useful!



We reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

## Contact us!



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