

LOW HEAD ROOM

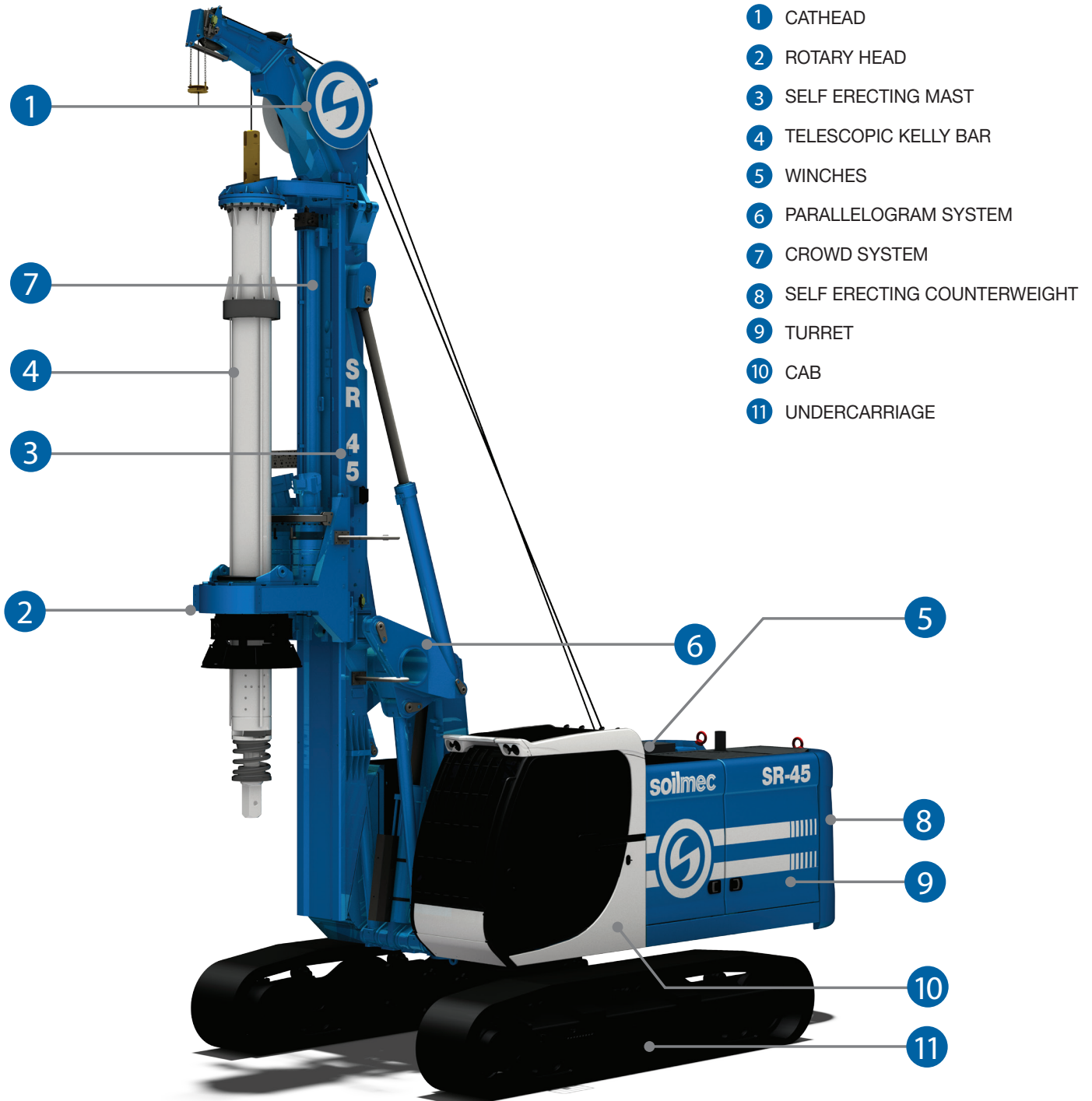
LHR



soilmec 
Drilling and Foundation Equipment

LHR

Low Head Room



The **Soilmec LHR quick conversion kit** is specially designed for works in low space condition, under the electric power lines or bridges, as well as existing structures. Drill rigs equipped with Low-Head-Room attachments provide a safe work environment and at less cost.

Soilmec has developed low-headroom

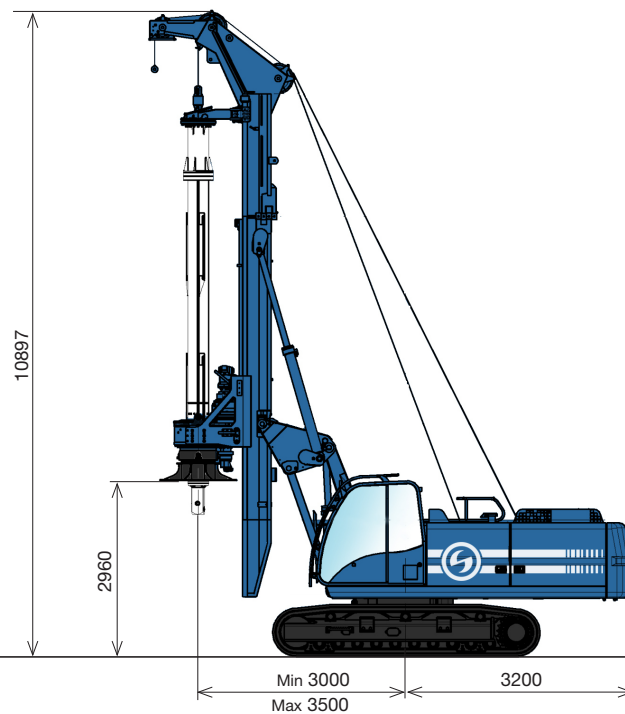
conversion kit that can be mounted on the new SR-30; SR-45; SR-75 and SR-95 for large diameters and deep piles.

The SR rig in LHR version is a compact drilling rig easy to assemble, move and reassemble, which is designed especially for working in limited headroom conditions. Thanks to the new Soilmec concept

design, the rig has extremely high performance in cased or uncased bored piles technology and can be optionally configured in continuous flight auger version.

SR-30 ADV Hydraulic Rotary Rig

LDP APPLICATIONS - LHR version



LDP Large Diameter Piles - CCS version

Operating weight	33000 kg	72752 lb
Max pile diameter	1500 mm	59,06 in
Max pile depth-friction kelly	18,8 m	61,68 ft
Max pile depth-locking kelly	17,9 m	58,73 ft

CFA Continuous Flight Auger

Max pile diameter	750 mm	29,53 in
Max pile depth w/o auger extension	8,5 m	27,89 ft
Max pile depth with auger cleaner w/o auger extension	7,5 m	24,61 ft
Extraction force	380 kN	85424 lbf

Rotary drive	Single gear version	Single gear version
Max torque (restricted, intermittent)	130 kNm	95881 lbf*ft
Rated torque	107 kNm	78918 lbf*ft
Speed of rotation (max)	33,0 rpm	33,0 rpm
Spin-off speed	106,0 rpm	106,0 rpm

CCS Crowd Cylinder System

Crowd force pull (down/up)	102 / 124 kN	22930 / 27875 lbf
Stroke	2550 mm	100 in

Engine	CUMMINS QSB.6.7 tier 4	CUMMINS QSB 6.7 tier 4
Rated output ISO 3046-I	164 kW @ 2200 rpm	220 HP @ 2200 rpm
Diesel tank capacity	350 l	92 US gal

Main winch	controlled descent	controlled descent
Line pull (1st layer)	135 kN	30348 lbf
Rope diameter	22 mm	0,87 in

Auxiliary winch	controlled descent	controlled descent
Line pull (1st layer)	65 kN	14612 lbf

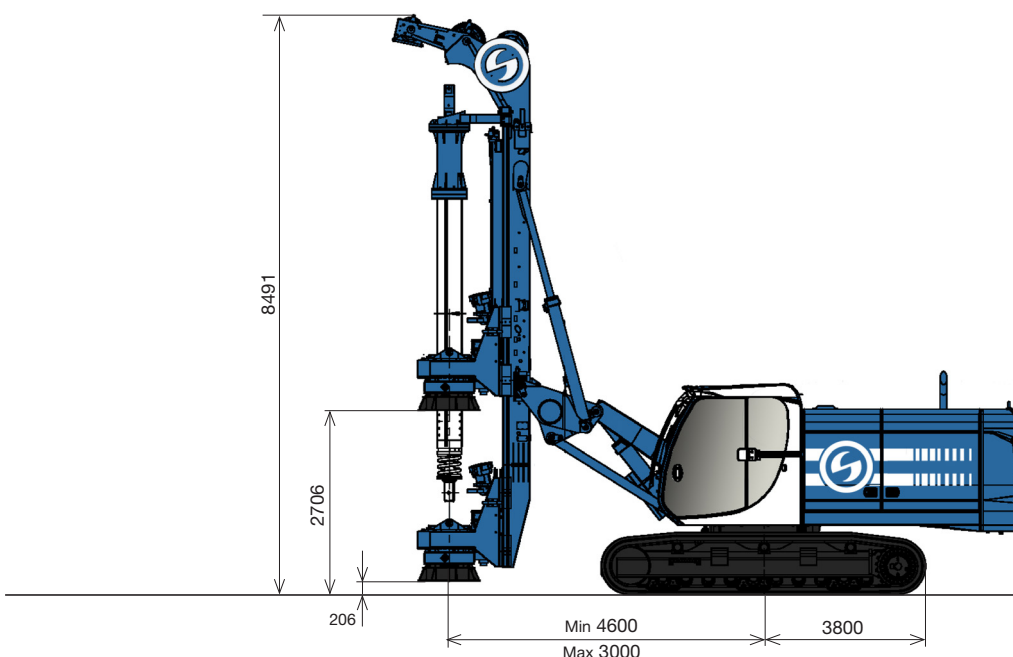
Hydraulic system		
Flow rates (main circuits)	352 l/min	93 US gal/min
Hydraulic oil tank capacity	380l	100 US gal

Undercarriage	variable gauge, telescopic side frames	variable gauge, telescopic side frames
Overall width of crawlers extended	3700 mm	146 in
Width of triple grouser track shoes	600 mm	24 in
Overall length of crawlers	4510 mm	178 in

Transport configuration		
Transport width	2550 mm	100 in
LDP Version - Transport weight c/w 5x4,5 kelly bar	33000 kg	72752 lb

SR-45 ADV Hydraulic Rotary Rig

LDP APPLICATIONS - LHR version



LDP Large Diameter Piles - CChS version

Operating weight	37800 kg	83334 lb
Max pile diameter	1500 mm	59,06 in
Max pile depth-friction kelly	2500 mm	98,43 in
Max pile depth-locking kelly	19,3 m	63,32 ft

CFA Continuous Flight Auger

Max pile diameter	1000 mm	39,37 in
Max pile depth w/o auger extension	8,5 m	27,89 ft
Max pile depth with auger cleaner w/o auger extension	7,5 m	24,61 ft
Extraction force	480 kN	107904 lbf

Rotary drive	Single gear version	Single gear version
Max torque (restricted, intermittent)	185 kNm	136447 lbf*ft
Rated torque	161 kNm	118746 lbf*ft
Speed of rotation (max)	47 rpm	47 rpm
Spin-off speed	146 rpm	146 rpm

CCS Crowd Cylinder System

Crowd force pull (down/up)	140 / 207 kN	31472 / 46534 lbf
Stroke	2500 mm	98 in

Engine	CUMMINS QSB.6.7 tier 4	CUMMINS QSB 6.7 tier 4
Rated output ISO 3046-I	201 kW @ 2000 rpm	269 HP @ 2000 rpm
Diesel tank capacity	380 l	100 US gal

Main winch	controlled descent	controlled descent
Line pull (1st layer)	165 kN	37092 lbf
Rope diameter	24 mm	0,94 in

Auxiliary winch	controlled descent	controlled descent
Line pull (1st layer)	65 kN	14612 lbf

Hydraulic system

Flow rates (main circuits)	2x 214 l/min	2x 57 US gal/min
Hydraulic oil tank capacity	450 l	119 US gal

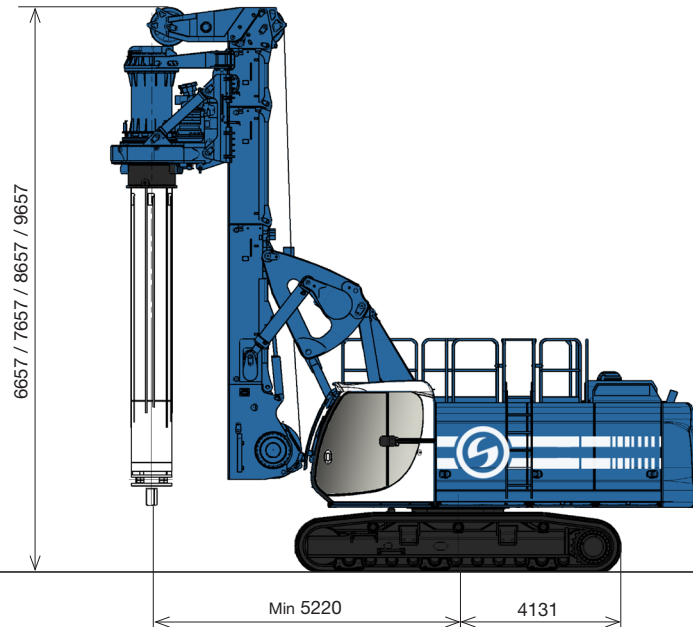
Undercarriage	variable gauge, telescopic side frames	variable gauge, telescopic side frames
Overall width of crawlers extended	3750 mm	148 in
Width of triple grouser track shoes	600 mm	24 in
Overall length of crawlers	4740 mm	187 in

Transport configuration

Transport width	2550 mm	100 in
LDP Version - Transport weight c/w 5x4,5 kelly bar	37800 kg	83334 lb

SR-75 ADV Hydraulic Rotary Rig

LDP APPLICATIONS - LHR version



LDP_Large Diameter Piles - CChS version

Operating weight	70000 kg	154322 lb
Max pile diameter	2500 mm	98,43 in
Max pile depth-locking kelly	17,9 m	199,80 ft

Rotary drive	Single gear version	Single gear version
Max torque (restricted, intermittent)	290 kNm	213889 lb*ft
Rated torque	250 kNm	184387 lb*ft
Speed of rotation (max)	40 rpm	40 rpm
Spin-off speed	100 rpm	100 rpm

CChS_Crowd Chain System

Crowd force pull (down/up)	230 / 124 kN	51704 / 27875 lbf
Stroke (0/1/2/3 m mast extension)	2440 / 3440 / 4440 / 5440 mm	96 / 135 / 175 / 214 in

Engine	CAT C13 tier 4	CAT C13 tier 4
Rated output ISO 3046-I	328 kW @ 1800 rpm	440 HP @ 1800 rpm
Diesel tank capacity	650 l	172 US gal

Main winch	controlled descent	controlled descent
Line pull (1st layer)	246 kN	55301 lbf
Rope diameter	30 mm	1,18 in

Auxiliary winch	controlled descent	controlled descent
Line pull (1st layer)	127 kN	28550 lbf

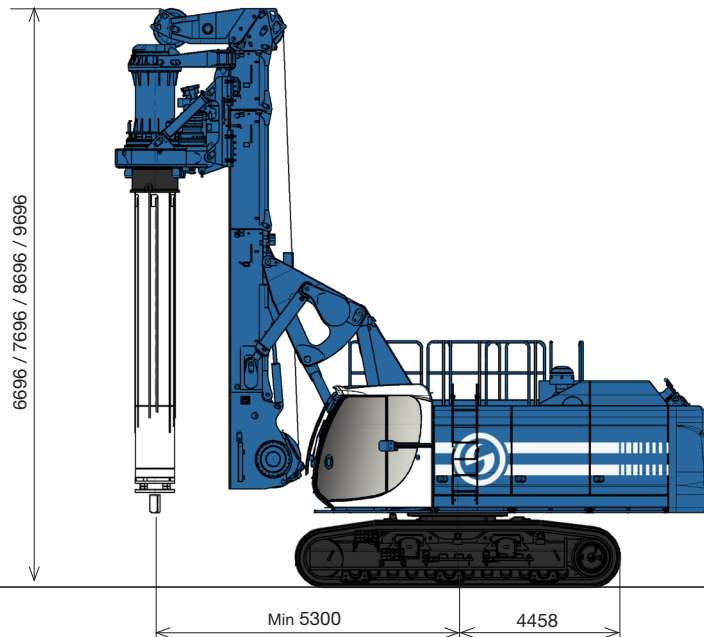
Hydraulic system		
Flow rates (main circuits)	2x 304 l/min	2x 80 US gal/min
Hydraulic oil tank capacity	800 l	211 US gal

Undercarriage	variable gauge, telescopic side frames	variable gauge, telescopic side frames
Overall width of crawlers extended	2830 mm	112 in
Width of triple grouser track shoes	750 mm	30 in
Overall length of crawlers	4430 mm	175 in

Transport configuration		
Transport width	3000 mm	118 in
LDP Version - Transport weight	49500 kg	109128 lb

SR-95 ADV Hydraulic Rotary Rig

LDP APPLICATIONS - LHR version

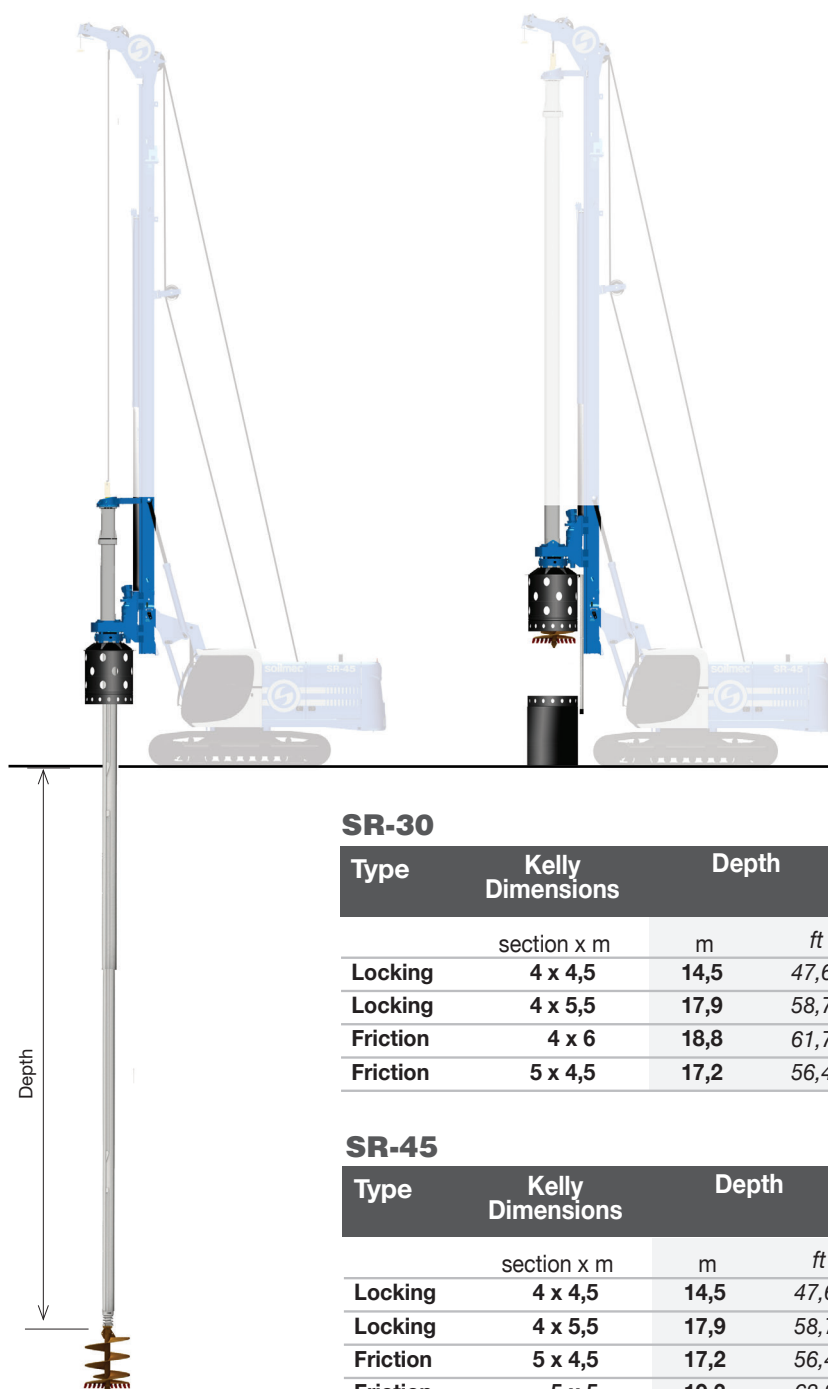


LDP_Large Diameter Piles - CChS version

Operating weight	9000 kg	19841 lb
Max pile diameter	2500 mm	98,43 in
Max pile depth-locking kelly	60,9 m	199,80 ft
Rotary drive		
	Single gear version	Single gear version
Max torque (restricted, intermittent)	290 kNm	213889 lbf*ft
Rated torque	250 kNm	184387 lbf*ft
Speed of rotation (max)	40 rpm	40 rpm
Spin-off speed	100 rpm	100 rpm
CChS_Crowd Chain System		
Crowd force pull (down/up)	230 / 124 kN	51704 / 27875 lbf
Stroke (0/1/2/3 m mast extension)	2440 / 3440 / 4440 / 5440 mm	96 / 135 / 175 / 214 in
Engine		
	CAT C15 tier 4	CAT C15 tier 4
Rated output ISO 3046-I	403 kW @ 1800 rpm	540 HP @ 1800 rpm
Diesel tank capacity	830 l	219 US gal
Main winch		
	controlled descent	controlled descent
Line pull (1st layer)	320 kN	71936 lbf
Rope diameter	32 mm	1,26 in
Auxiliary winch		
	controlled descent	controlled descent
Line pull (1st layer)	132 kN	29674 lbf
Hydraulic system		
Flow rates (main circuits)	2x 444 l/min	2x 117 US gal/min
Hydraulic oil tank capacity	1050 l	277 US gal
Undercarriage		
	variable gauge, telescopic side frames	variable gauge, telescopic side frames
Overall width of crawlers extended	4700 mm	185 in
Width of triple grouser track shoes	900 mm	35 in
Overall length of crawlers	5680 mm	224 in
Transport configuration		
Transport width	3200 mm	126 in
LDP Version - Transport weight	45400 kg	100089 lb

KELLY BAR

LHR version



SR-30

Type	Kelly Dimensions	Depth		Weight		CCS SYSTEM H	
		section x m	m ft	ton	ton	m	ft
Locking	4 x 4,5	14,5	47,6	2,0	2,0	3,8	12,5
Locking	4 x 5,5	17,9	58,7	2,3	2,3	2,9	9,5
Friction	4 x 6	18,8	61,7	2,4	2,4	2,8	9,2
Friction	5 x 4,5	17,2	56,4	3,2	3,3	3,9	12,8

SR-45

Type	Kelly Dimensions	Depth		Weight		CCS SYSTEM H	
		section x m	m ft	ton	ton	m	ft
Locking	4 x 4,5	14,5	47,6	2,0	2,0	2,8	9,2
Locking	4 x 5,5	17,9	58,7	2,3	2,3	2,6	8,5
Friction	5 x 4,5	17,2	56,4	3,2	3,3	2,7	8,9
Friction	5 x 5	19,3	63,3	3,5	3,6	2,2	7,2

SR-75 / SR-95

Max extension		Max kelly lenght		kelly x4		kelly x5		kelly x9		kelly x10	
m	ft	m	ft	m	ft	m	ft	m	ft	m	ft
2+1	6.6 + 3.3	7	23	23	75	29,3	96	54,6	179	60,9	200
2+1	6.6 + 3.3	6	20	20	66	25,3	83	46,6	153	51,9	170
2	6.6	6	20	19	62	24,3	80	45,6	150	50,9	167
2	6.6	5	16	16	52	20,3	67	37,6	123	41,9	137
1	3.3	5	16	15	49	19,3	63	36,6	120	40,9	134
1	3.3	4	13	12	39	15,3	50	28,6	94	31,9	105
none	none	4	13	11	36	14,3	47	27,6	91	30,9	101
none	none	3	10	8	26	11,3	37	19,6	64	21,9	72

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