

KS 100 Eck



The KS 100 Eck was designed for the easy and cost-effective shoring of circular and masonry manholes. Based on the KS 100 standard box, it has extra panels at the corners as a safeguard against soil pressure, e.g. when constructing manholes.

The sizes have been selected to ensure that conventionally available circular manholes can be handled up to a diameter of 3 m. The maximum pipe culvert height for the installation of supply and discharge lines also matches the usual dimensions.

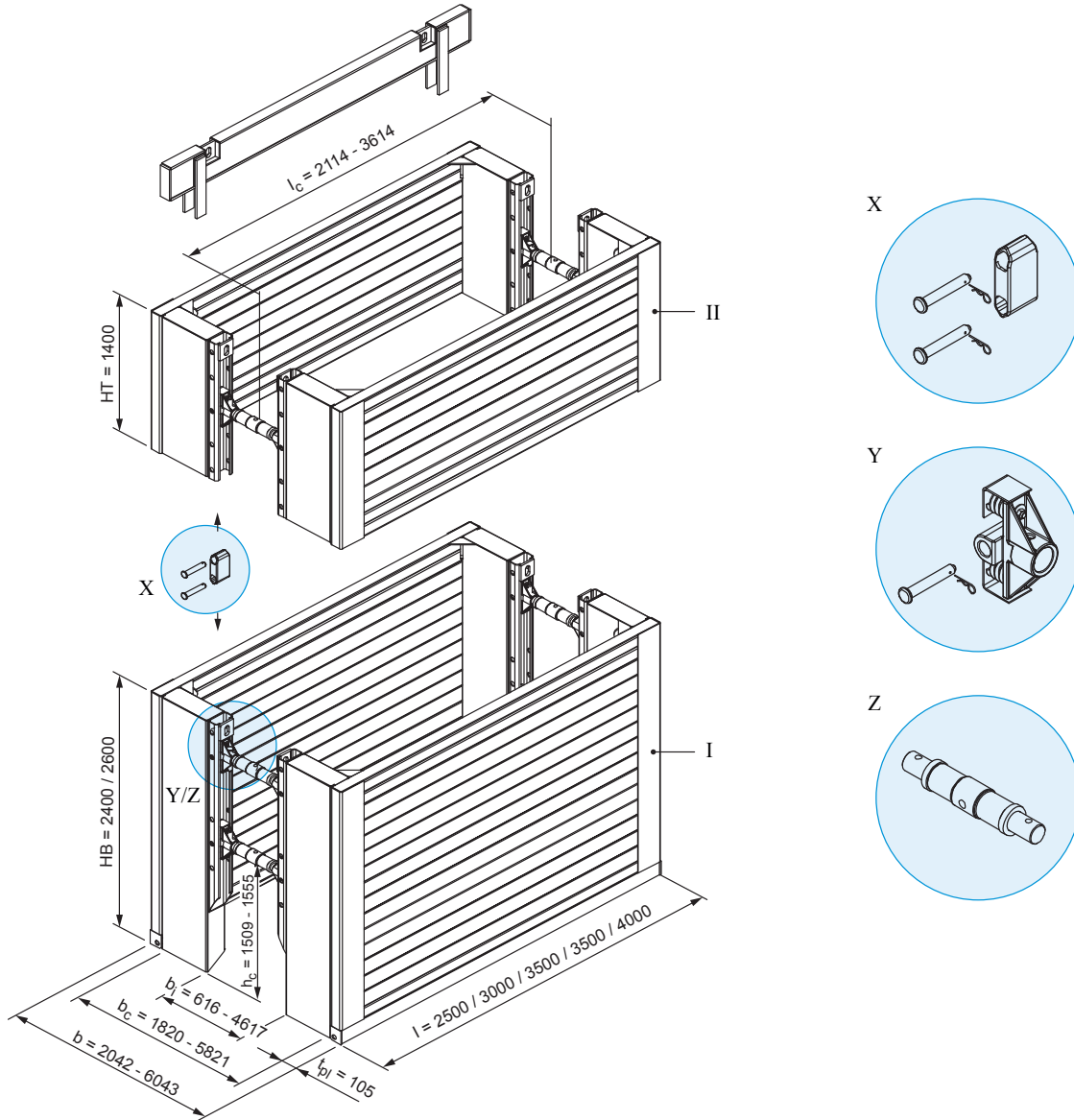
Basic data

Shoring length	2,50 m - 4,00 m
Height base unit	2,40 m / 2,60 m
Height top unit	1,40 m
Pipe culvert height	max. 1,56 m
Shoring depth	max. 4,00 m
Trench width	variable, see page 92/93

Advantages

- Simple, cost-effective shoring for circular and masonry manholes
- Extra panels on the corners to safeguard against soil pressure

KS 100 Eck



(All dimensions in mm)

I	Base unit	l_c	Pipe culvert length	t_{pl}	Thickness
II	Top unit	b	Shoring / trench width	X	Connector
HB	Height base unit	b_c	Inner width	Y	Mushroom spring with pin
HT	Height top unit	b_i	Inner culvert width	Z	Spindle 98x...
l	Length	h_c	Pipe culvert height		

Base units

Art. No.	l [m]	h [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
135 120	3,50	2,40	0,105	1,52	3,114	1.060,0	2.401,0 *	8,40	44,12
135 100	2,50	2,60	0,105	1,56	2,114	950,0	2.145,0 *	6,50	61,61
135 110	3,00	2,60	0,105	1,56	2,614	1.041,0	2.347,0 *	7,80	51,34
135 130	3,50	2,60	0,105	1,56	3,114	1.160,0	2.549,0 *	9,10	44,12
135 140	4,00	2,60	0,105	1,56	3,614	1.340,0	2.945,0 *	10,40	33,02

* with spindle 98x700

Top units

Art. No.	l [m]	h [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
135 240	2,50	1,40	0,105	-	3,614	655,0	1.485,0 *	3,50	61,61
135 250	3,00	1,40	0,105	-	3,614	720,0	1.511,0 *	4,20	51,34
135 260	3,50	1,40	0,105	-	3,614	831,0	1.837,0 *	4,90	44,12
135 270	4,00	1,40	0,105	-	3,614	940,0	2.055,0 *	5,60	33,02

* with spindle 98x700

Struts / Extension bars

Art. No.	Short description	l [m]	G [kg]
139 385	Plug-in adapter pipe, ZW SB - 108x1000	1,00	28,0
139 400	Plug-in adapter pipe, ZW SB - 108x1500	1,50	37,4
139 420	Plug-in adapter pipe, ZW SB - 108x2000	2,00	47,3
139 425	Plug-in adapter pipe, ZW SB - 108x2500	2,50	60,0
139 430	Plug-in adapter pipe, ZW SB - 108x300	0,30	13,8
139 445	Plug-in adapter pipe, ZW SB - 108x500	0,50	17,7
139 470	Plug-in adapter pipe, ZW SB - 121x1000	1,00	36,3
139 510	Plug-in adapter pipe, ZW SB - 121x500	0,50	25,1
108 950	Spindle -heavy duty design-, lefthand, 98x817		38,0
108 960	Spindle -heavy duty design-, righthand, 98x817		39,0
138 260	Spindle to stick, 98x392		15,7
138 280	Spindle to stick, 98x550		22,0
138 290	Spindle to stick, 98x700		34,0
138 300	Spindle to stick, 98x817, complete		76,9

Shoring widths for spindle 98x550

Extension bar	l [m]	b _i [m]	b _c [m]	b [m]
	without	0,616 - 0,816	1,820 - 2,020	2,042 - 2,242
139 430	0,30	0,916 - 1,116	2,120 - 2,320	2,342 - 2,542
139 445	0,50	1,116 - 1,316	2,320 - 2,520	2,542 - 2,742
139 385	1,00	1,616 - 1,816	2,820 - 3,020	3,042 - 3,242
139 400	1,50	2,116 - 2,316	3,320 - 3,520	3,542 - 3,742
139 420	2,00	2,616 - 2,816	3,820 - 4,020	4,042 - 4,242
139 425	2,50	3,116 - 3,316	4,320 - 4,520	4,542 - 4,742

Shoring widths for spindle 98x700

Extension bar	l [m]	b _i [m]	b _c [m]	b [m]
	without	0,792 - 1,132	1,996 - 2,336	2,218 - 2,558
139 430	0,30	1,092 - 1,432	2,296 - 2,636	2,518 - 2,858
139 445	0,50	1,292 - 1,632	2,496 - 2,836	2,718 - 3,058
139 385	1,00	1,792 - 2,132	2,996 - 3,336	3,218 - 3,558
139 400	1,50	2,292 - 2,632	3,496 - 3,836	3,718 - 4,058
139 420	2,00	2,792 - 3,132	3,996 - 4,336	4,218 - 4,558
139 425	2,50	3,292 - 3,632	4,496 - 4,836	4,718 - 5,058

Shoring widths for spindle 98x817

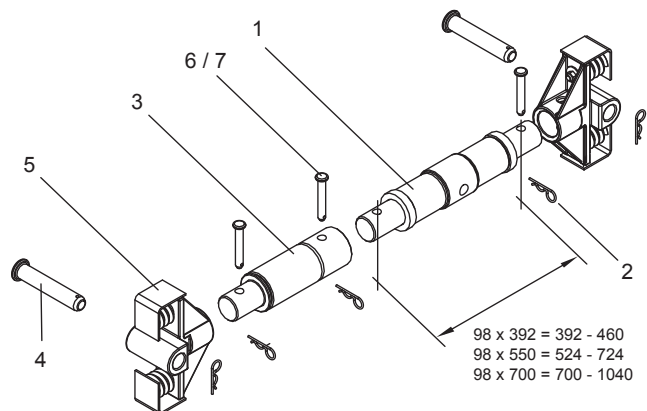
Extension bars	l [m]	b _i [m]	b _c [m]	b [m]
0	0,00	0,717 - 1,117	1,921 - 2,321	2,143 - 2,543
1	0,50	1,217 - 1,617	2,421 - 2,821	2,643 - 3,043
2	1,00	1,717 - 2,117	2,921 - 3,321	3,143 - 3,543
3	1,50	2,217 - 2,617	3,421 - 3,821	3,643 - 4,043
4	2,00	2,717 - 3,117	3,921 - 4,321	4,143 - 4,543
5	2,50	3,217 - 3,617	4,421 - 4,821	4,643 - 5,043
6	3,00	3,717 - 4,117	4,921 - 5,321	5,143 - 5,543
7	3,50	4,217 - 4,617	5,421 - 5,821	5,643 - 6,043

A maximum of 7 extension bars with a length of 500 mm may be used.

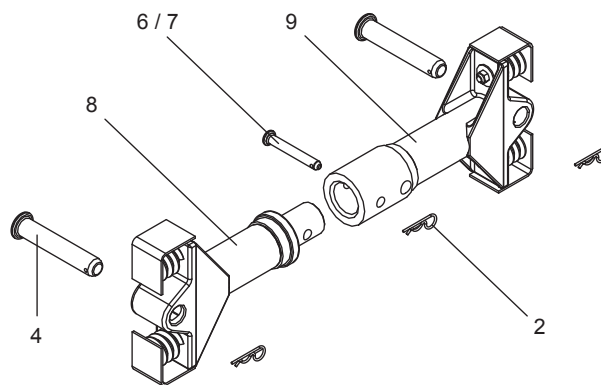
Different and larger widths are possible by combining different spacer bars.

l	Length	h	Height	G / VP	Weight per shoring panel
l _c	Pipe culvert length	h _c	Pipe culvert height	G / Box	Weight per shoring box
b	Shoring / trench width	t _{pl}	Thickness	eh	Earth pressure max.
b _c	Inner width	A	Area		
b _i	Clear width of pipe opening	G	Weight		

Strut 98 x 392 / 550 / 700



Strut 98 x 817



1	Spindle	4	Pin 212 x 43	7	Pin 140 x 20
2	Spring cotter	5	Mushroom spring		
3	Plug-in extension bar	6	Pin 125 x 20		

Accessories / Spares

Art. No.	Short description	l [m]	d [m]	G [kg]
842 752	Adapter for DKU piling frame, corner shoring, h = 0.50 m KDVI			55,0
842 753	Adapter for DKU piling frame, corner shoring, h = 1.00 m KDVI			94,0
850 699	Adjustment bar	0,7	0,024	2,5
139 070	Chain sling connection, 4-leg, 2300 x 13	2,30		45,0
139 080	Chain sling connection, 4-leg, 2800 x 13	2,80		57,0
139 100	Connection stanchion 290 x 145			5,5
842 099	DKU piling frame guide frame	2,27		105,0
842 100	DKU piling frame guide frame	3,81		175,0
859 982	Drop-in bearing block, adjustable, Krings			12,0
859 981	Drop-in bearing block, Emunds+Staudinger			26,0
110 070	Fixing for pressure spring 100 x 85	0,100	0,085	0,8
119 011	KVL adapter for spindles 98x530 / 98x700			7,6
138 170	Mushroom FP 80			13,0
IA 0120 F	Nut M 16			0,03
IA 0130 F	Nut M 20			0,03
138 030	Pin 125 x 20	0,125	0,020	0,4
138 040	Pin 140 x 20	0,140	0,020	0,4
138 070	Pin 212 x 43	0,212	0,043	2,5
861 077	Pressure beam (Lightweight shoring, KS 60, KVL)	1,80		80,0
861 078	Pressure beam (Lightweight shoring, KS 60, KVL)	2,30		95,0
861 079	Pressure beam (Lightweight shoring, KS 60, KVL)	2,80		110,0
861 080	Pressure beam (Lightweight shoring, KS 60, KVL)	3,30		125,0
861 076	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	1,60		176,0
861 074	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	2,35		236,0
861 070	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	2,80		271,0
861 071	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	3,40		318,0

Accessories / Spares (contd.)

Art. No.	Short description	l [m]	d [m]	G [kg]
138 160	Pressure spring FP 80	0,084	0,054	0,8
100 690	Rubber parts GPU 30 x 40			0,1
IB 0310 F	Screw M 16 x 55			0,11
IB 0360 F	Screw M 20 x 45			0,17
138 200	Spring cotter 92 x 5	0,092	0,005	0,1
336 960	Support bracket for DKU piling frame element			40,0
821 100	Suspension chain KL-13-8	5,000		25,7

l	Length	d	Diameter	G	Weight
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