

Dragbox



The Dragbox was developed for shoring projects carried out exclusively in open and mainly unbuilt-up terrain. The space available in the Dragbox and the installed towing panel is used for pipe-laying. Once the pipe has been laid, the excavator drags the Dragbox forward by the towing panel for the next pipe-laying cycle. To stabilize the system and for reasons of structural strength, the Dragbox has an extremely sturdy horizontal connecting element that keeps the two shoring panels the right distance apart. If necessary, it can be extended using special extension bars. Elongated cutting shoes attached to the front edge of the shoring panels aid the dragging process.

By redesigning the towing panel in a triangular shape, the efficiency of the Dragbox has been enhanced still further. During pipe-laying, working on compacting the backfill against the ground can start at the exposed face of the angled towing panel.

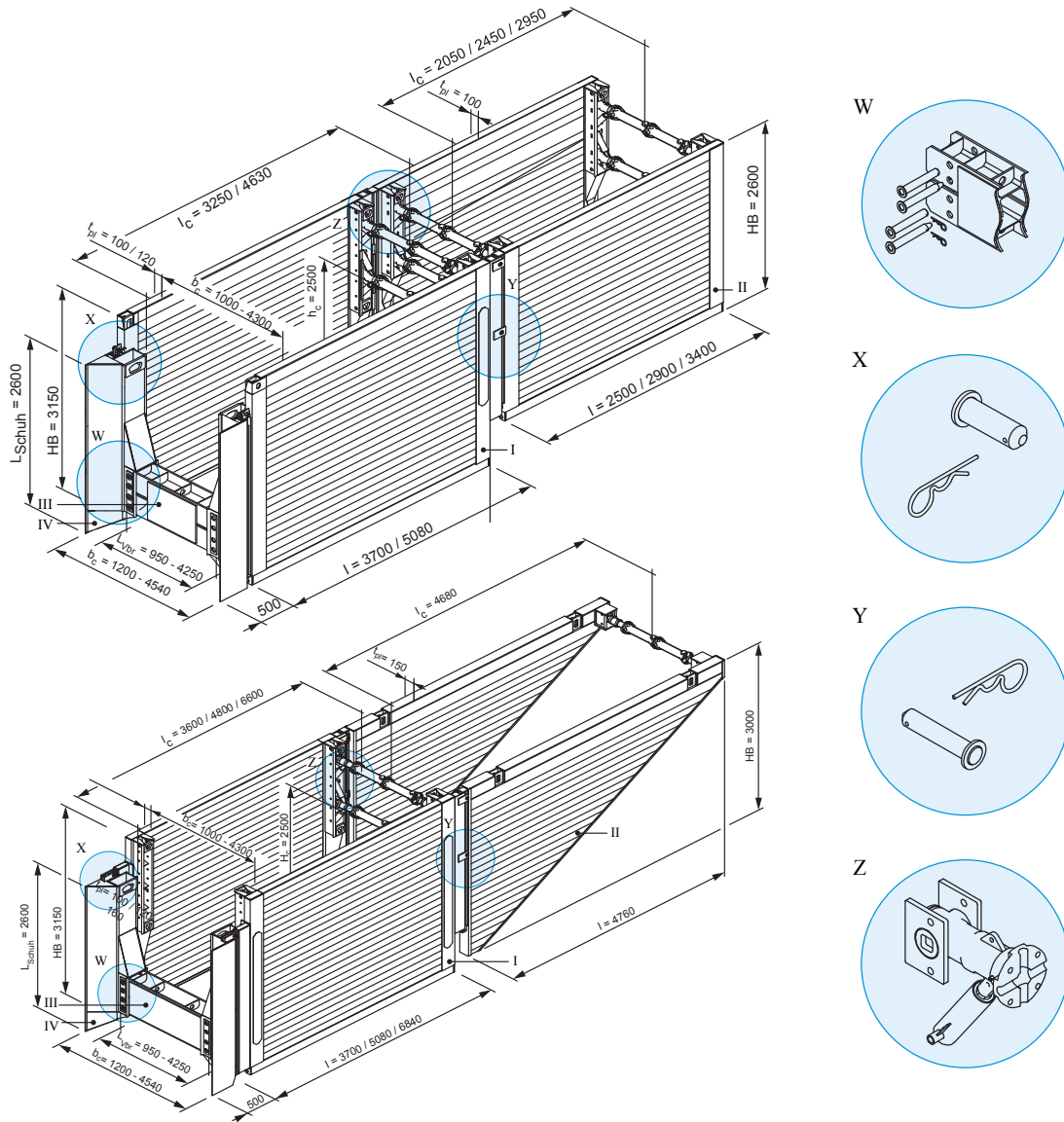
Basic data

Shoring depth	max. 4,00 m
Panel length	3,70 m / 5,08 m
Base panel height	3,00 m / 3,15 m
Pipe culvert height	max. 2,00 m
Trench width	variable, see page 73

Advantages

- Ideal for shorings in open terrain
- Exceptionally strong horizontal connecting element enables it to be dragged in the trench

Dragbox



(All dimensions in mm)

I	Dragbox base unit	L _{Schuh}	Length dragbox cutting edge	t _{pl}	Thickness
II	Towing plate	l	Length	W	Pin for dragbox beam
III	Dragbox-beam	l _c	Pipe culvert length	X	Pin for cutting edge
IV	Dragbox cutting edge	b	Shoring / trench width	Y	Pin for towing panel
HB	Height base unit	b _c	Inner width	Z	Spreader with bearing plate and shock absorber
L _{Vbr}	Length dragbox-beam	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]
802 269	3,70	3,15	0,10	2,00	3,25	1.570,0	3.140,0
802 411	5,08	3,00	0,12	1,88	4,63	2.085,0	4.170,0

Dragbox cutting edge

Art. No.	Short description	l [m]	G [kg]
847 100	Dragbox cutting edge right hand	0,65	580,0
847 150	Dragbox cutting edge left hand	0,65	580,0

Dragbox beams

Art. No.	Short description	l [m]	G [kg]
847 200	Dragbox beam	0,950	295,0
847 210	Dragbox beam	1,500	500,0
847 220	Dragbox beam	2,050	715,0
847 230	Dragbox beam	2,600	920,0
847 240	Dragbox beam	3,150	1.125,0
847 250	Dragbox beam	3,700	1.330,0
847 260	Dragbox beam	4,250	1.530,0

Pins

Art. No.	Short description	l [m]	G [kg]	d [m]
847 300	Pin (edgeless)	0,385	10,0	0,06
847 301	Pin (sharpened)	0,445	11,0	0,06

Extension bars

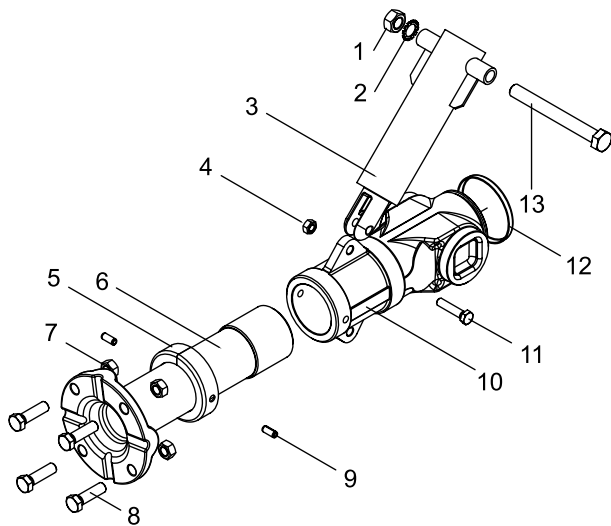
Art. No.	Short description	l [m]	G [kg]
850 091	Extension bar GGG 50	0,250	11,2
850 100	Extension bar GGG 50	0,550	18,7
850 112	Extension bar HEB 180	0,275	28,0
850 110	Extension bar HEB 180	0,550	43,0
850 124	Extension bar HEB 180	1,100	70,0
850 132	Extension bar HEB 180	1,650	100,0
850 135	Extension bar HEB 180	2,200	130,0
850 105	Extension bar HEB 220	0,275	40,0
850 115	Extension bar HEB 220	0,550	58,0
850 121	Extension bar HEB 220	1,100	98,0
850 130	Extension bar HEB 220	1,650	140,0
850 141	Extension bar HEB 220	2,200	180,0

Trench widths

l_{zSt}	Length dragbox beam [m]	b_c [m]	b [m]	b [m]
0,00	0,95	1,00	1,20	1,24
0,55	1,50	1,55	1,75	1,79
1,10	2,05	2,10	2,30	2,34
1,65	2,60	2,65	2,85	2,89
2,20	3,15	3,20	3,40	3,44
2,75	3,70	3,75	3,95	3,99
3,30	4,25	4,30	4,50	4,54

for base units $t_{pl} = 0,10$ m for base units $t_{pl} = 0,12$ m

E+S spreader, complete, right/left, with shock absorber



- | | |
|----|------------------------------|
| 1 | Nut M 20 |
| 2 | Lock washer A 20 |
| 3 | Shock absorber |
| 4 | Nut M 12 |
| 5 | Metal cap for spindle |
| 6 | Spindle, right / left |
| 7 | Nut M 16 |
| 8 | Hexagon screw M 16 x 55 |
| 9 | Damping sleeve 10 x 24 mm |
| 10 | Cast-iron nut, right / left |
| 11 | Hexagon screw M 12 x 55 |
| 12 | PVC dust cap for spindle nut |
| 13 | Hexagon screw M 20 x 180 |

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
842 750	Adapter for DKU piling frame, E+S spreader			31,0
850 699	Bar for adjusting E+S/Krings spindles (Medium, Magnum, KS 100, slide rail)	0,7	0,024	2,5
302 125	Bearing plate -closed-			4,2
850 500	Cast iron connector (for Medium boxes, Magnum boxes, Manhole)			6,7
862 214	Connector (for Linear box, top unit with struts)			6,1
HB 0190 F	Damping sleeve 10 x 24 mm			0,01
842 099	DKU piling frame guide frame	2,27		105,0
842 100	DKU piling frame guide frame	3,81		175,0
859 981	Drop-in bearing block, E+S			25,6
HD 0110 F	Grease nipple		0,01	0,01
HD 0050 F	Metal cap for spindle			0,1
HD 0013 F	Metal cap for spindle housing			0,2
IA 0095 F	Nut M 12			0,01
IA 0120 F	Nut M 16			0,03
IA 0130 F	Nut M 20			0,03
IA 0185 F	Nut M 30			0,30

Accessories / Spares (contd.)

Art. No.	Short description	l [m]	d [m]	G [kg]
HD 0040 F	PE cap for the spindle			0,01
850 600	Pin	0,195	0,035	1,8
850 610	Pin (for Lightweight box)	0,095	0,030	0,5
850 614	Pin 200 x 40 mm (Linear box boogie car)			1,9
851 010	Pressure plate (for Lightweight-Boxes)			7,0
851 005	Pressure plate (for Medium Boxes, Magnum Boxes, Manhole)			19,0
IB 0215 F	Screw M 12 x 55			0,06
IB 0310 F	Screw M 16 x 55			0,11
IB 0420 F	Screw M 20 x 180			0,56
IB 0360 F	Screw M 20 x 45			0,17
300 100	Shock absorber	0,143		4,5
GB 0070 E	Spindle housing, left hand			9,4
GB 0040 E	Spindle housing, right hand			9,4
GB 0090 E	Spindle, lefthand -heavy duty-			17,1
GB 0080 E	Spindle, lefthand -hollow-			9,5
GB 0030 E	Spindle, righthand -heavy duty-			17,1
GB 0020 E	Spindle, righthand -hollow-			9,5
301 010	Spreader complete, left hand -heavy duty-			27,1
301 000	Spreader complete, left hand -hollow-			19,5
300 010	Spreader complete, right hand -heavy duty-			27,1
300 000	Spreader complete, right hand -hollow-			19,5
159 161	Spring cotter (850 614)			0,1
HE 0050 F	Spring cotter 6 mm		0,006	0,03
ID 0160 F	Spring ring A 20			0,01
336 960	Support bracket for DKU piling frame element			40,0
821 100	Suspension chain KL-13-8	5,000		25,7

l	Length	b _c	Inner width	G	Weight
l _c	Pipe culvert length	h _c	Pipe culvert height	G / VP	Weight per shoring panel
l _{zwSt.}	Total extension bar length	t _{pl}	Thickness	G / Box	Weight per shoring box
b	Shoring / trench width	A	Area	eh	Earth pressure max.