

Magnum-Boxes



The boxes of the Medium and Magnum class keep the project running smoothly and cost-effectively, particularly when pipes with large diameters or lengths have to be laid. The edge-supported box system scores with a large pipe clearance between the bottom strut and the shoring panel below it. This simplifies the installation of pipes with nominal widths up to 2,500 mm. For construction projects involving pipes greater than 6 m in length, the Magnum boxes with large panel lengths are an ideal choice.

The top panels of the Magnum boxes are compatible with the Medium shoring system and can be also used there as top panels. The strut system is identical to that of Lightweight and Medium shoring with full compatibility.

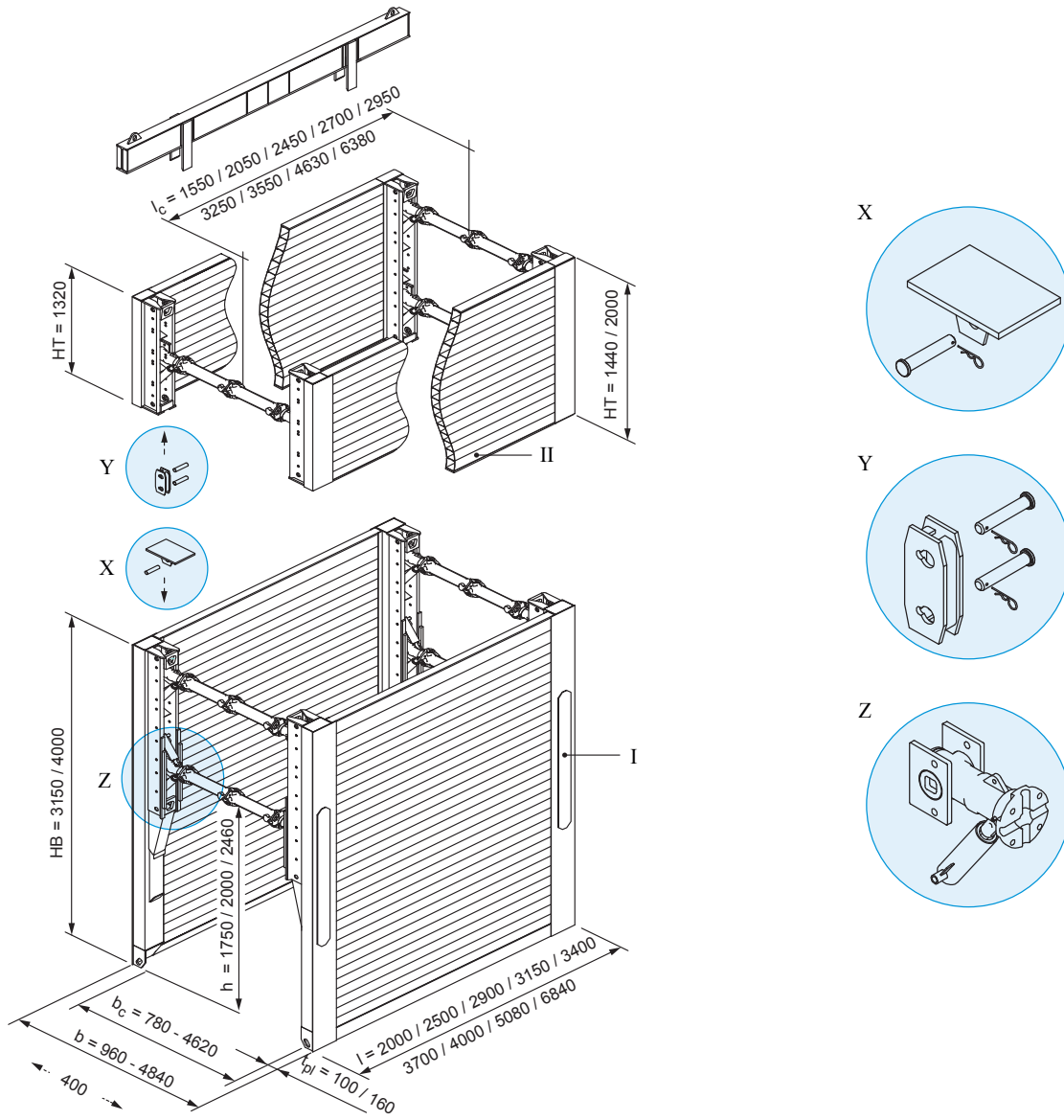
Basic data

Shoring length	2,00 m - 6,84 m
Height base unit	3,15 m / 4,00 m
Height top unit	1,32 m / 1,44 m / 2,00 m
Pipe culvert height	1,75 m / 2,00 m / 2,46 m
Weight	1860 kg - 7130 kg
Trench width	variable, see page 64

Advantages

- Cost-effective shoring solution, e.g. for laying large or long pipes
- Strut system compatible with Lightweight and Medium shoring
- Top panels compatible with Medium shoring

Magnum-Boxes



(All dimensions in mm)

I	Base unit	l_c	Pipe culvert length	X	Pressure plate
II	Top unit	b	Shoring / trench width	Y	Connector
HB	Height base unit	b_c	Inner width	Z	Spreader with bearing plate and shock absorber
HT	Height top unit	h_c	Pipe culvert height		
l	Length	t_{pl}	Thickness		

Base units (Height 3,15 m)

Art. No.	l [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
802 036	2,00	0,10	2,01	1,55	930,0	1.860,0	6,30	73,1
802 040	2,50	0,10	2,01	2,05	1.042,0	2.084,0	7,50	58,5
802 050	2,90	0,10	2,01	2,45	1.138,0	2.276,0	8,70	50,4
802 175	3,40	0,10	2,01	2,95	1.260,0	2.520,0	10,20	43,0
802 210	3,70	0,10	2,01	3,25	1.428,0	2.856,0	11,10	39,5
802 300	4,00	0,10	2,01	3,55	1.579,0	3.158,0	12,00	36,5
802 425	5,08	0,12	2,01	4,63	1.918,0	3.836,0	15,24	28,6
802 460	6,84	0,16	1,75	6,38	3.565,0	7.130,0	21,55	25,08

Base units (Height 4,00 m)

Art. No.	l [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
802 100	3,15	0,08	2,46	2,70	1.385,0	2.770,0	12,60	46,0
802 197 A	3,40	0,09	2,46	2,95	1.568,0	3.136,0	13,60	41,0

Top units (Height 1,32 m)

Art. No.	l [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
800 550	2,00	0,10	-	1,55	463,0	926,0	2,64	165,0
800 600	2,50	0,10	-	2,05	531,0	1.062,0	3,30	99,3
800 650	2,90	0,10	-	2,45	578,0	1.156,0	3,83	71,5
802 560	3,15	0,08	-	2,70	670,0	1.340,0	4,16	60,7
800 700	3,40	0,10	-	2,95	658,0	1.316,0	4,49	50,5
800 800	3,70	0,10	-	3,25	692,0	1.384,0	4,88	42,1
800 900	4,00	0,10	-	3,55	775,0	1.550,0	5,28	43,8
802 814	5,08	0,12	-	4,63	1.110,0	2.220,0	6,71	34,2

Top units (Height 1,44 m)

Art. No.	l [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
802 815	6,84	0,16	-	6,38	1.505,0	3.010,0	9,85	25,8

Top units (Height 2,00 m)

Art. No.	l [m]	t _{pl} [m]	h _c [m]	l _c [m]	G / VP [kg]	G / Box [kg]	A [m ²]	eh [kN/m ²]
802 680	2,00	0,10	-	1,55	697,0	1.394,0	4,00	165,0
802 690	2,50	0,10	-	2,05	785,0	1.570,0	5,00	99,3
802 550	2,90	0,10	-	2,45	840,0	1.680,0	5,80	71,5
802 600	3,15	0,08	-	2,70	860,0	1.720,0	6,30	60,7
802 700	3,40	0,10	-	2,95	930,0	1.860,0	6,80	50,5
802 750	3,70	0,10	-	3,25	990,0	1.980,0	7,40	42,1
802 751	4,00	0,10	-	3,55	1.085,0	2.170,0	8,00	43,8

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

Trench widths (for cast iron tubular extension bars l = 0.55 m)

Anz.-ZwSt.	l _{ZwSt.} [m]	b _c [m]	for base element h = 3,15 m			for base element h = 4,00 m		
			Element l = 4,00 m	Element l = 5,08 m	Element l = 6,84 m	Element l = 3,15 m	Element l = 3,40 m	
			b [m]	b [m]	b [m]	b _c [m]	b [m]	b [m]
0	0,000	0,78 - 1,22	0,98 - 1,42	1,02 - 1,46	1,10 - 1,54	0,88 - 1,32	1,04 - 1,48	1,08 - 1,52
1	0,550	1,33 - 1,77	1,53 - 1,97	1,57 - 2,01	1,65 - 2,09	1,43 - 1,87	1,59 - 2,03	1,63 - 2,07
2	1,100	1,88 - 2,32	2,08 - 2,52	2,12 - 2,56	2,20 - 2,64	1,98 - 2,42	2,14 - 2,58	2,18 - 2,62
3	1,650	2,43 - 2,87	2,63 - 3,07	2,67 - 3,11	2,75 - 3,19	2,53 - 2,97	2,69 - 3,13	2,73 - 3,17
4	2,200	2,98 - 3,42	3,18 - 3,62	3,22 - 3,66	3,30 - 3,74	3,08 - 3,52	3,24 - 3,68	3,28 - 3,72
5	2,750	3,53 - 3,97	3,73 - 4,17	3,77 - 4,21	3,85 - 4,29	3,63 - 4,07	3,79 - 4,23	3,83 - 4,27
max. 6	3,300	4,08 - 4,52	4,28 - 4,72	4,32 - 4,76	4,40 - 4,84	4,18 - 4,62	4,34 - 4,78	4,38 - 4,82

From-to sizes dependent on spindle adjustment range.

Other trench widths possible by combining the two different extension bar lengths l = 0.25 m and l = 0.55 m.

Larger trench widths available on request.

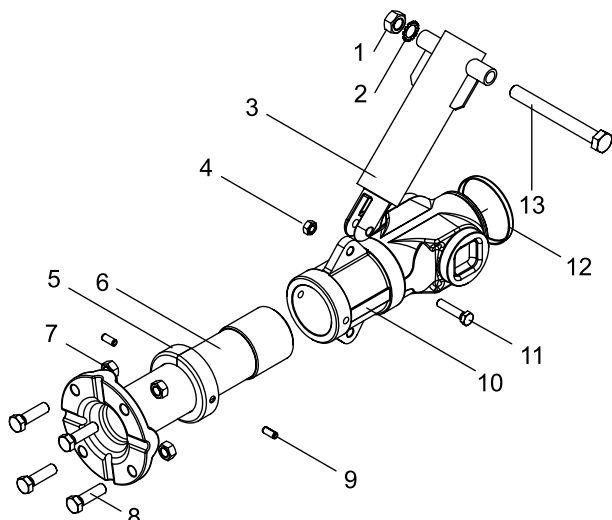
Trench widths (for extension bars HEB 180)

Anz.-ZwSt.	l _{ZwSt.} [m]	b _c [m]	for base element h = 3.15 m			for base element h = 4.00 m		
			Element l = 4.00 m	Element l = 5.08 m	Element l = 6.84 m	Element l = 3.15 m	Element l = 3.40 m	
			b [m]	b [m]	b [m]	b _c [m]	b [m]	b [m]
0	0,000	0,78 - 1,22	0,98 - 1,42	1,02 - 1,46	1,10 - 1,54	0,88 - 1,32	1,04 - 1,48	1,08 - 1,52
1	0,275	1,055 - 1,495	1,255 - 1,695	1,295 - 1,735	1,375 - 1,815	1,155 - 1,595	1,315 - 1,755	1,355 - 1,795
1	0,550	1,33 - 1,77	1,53 - 1,97	1,57 - 2,01	1,65 - 2,09	1,43 - 1,87	1,59 - 2,03	1,63 - 2,07
1	1,100	1,88 - 2,32	2,08 - 2,52	2,12 - 2,56	2,20 - 2,64	1,98 - 2,42	2,14 - 2,58	2,18 - 2,62
1	1,650	2,43 - 2,87	2,63 - 3,07	2,67 - 3,11	2,75 - 3,19	2,53 - 2,97	2,69 - 3,13	2,73 - 3,17
1	2,200	2,98 - 3,42	3,18 - 3,62	3,22 - 3,66	3,30 - 3,74	3,08 - 3,52	3,24 - 3,68	3,28 - 3,72
1	3,300	4,08 - 4,52	4,28 - 4,72	4,32 - 4,76	4,40 - 4,84	4,18 - 4,62	4,34 - 4,78	4,38 - 4,82

From-to dimensions depend on the spindle adjustment range.

Other trench widths are possible by combining different HEB lengths.

Larger trench widths are available on request.

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
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

Accessories / Spares (contd.)

Art. No.	Short description	l [m]	d [m]	G [kg]
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

Anz _{ZwSt}	Number of extension bars	b _c	Inner width	G / VP	Weight per shoring panel
l _{ZwSt}	Total extension bar length	h _c	Vertical clearance	G / Box	Weight per shoring box
l	Length	t _{pl}	Panel thickness	eh	Max. soil pressure
l _c	Max. pipe length	A	Area		
b	Shoring / trench width	G	Weight		