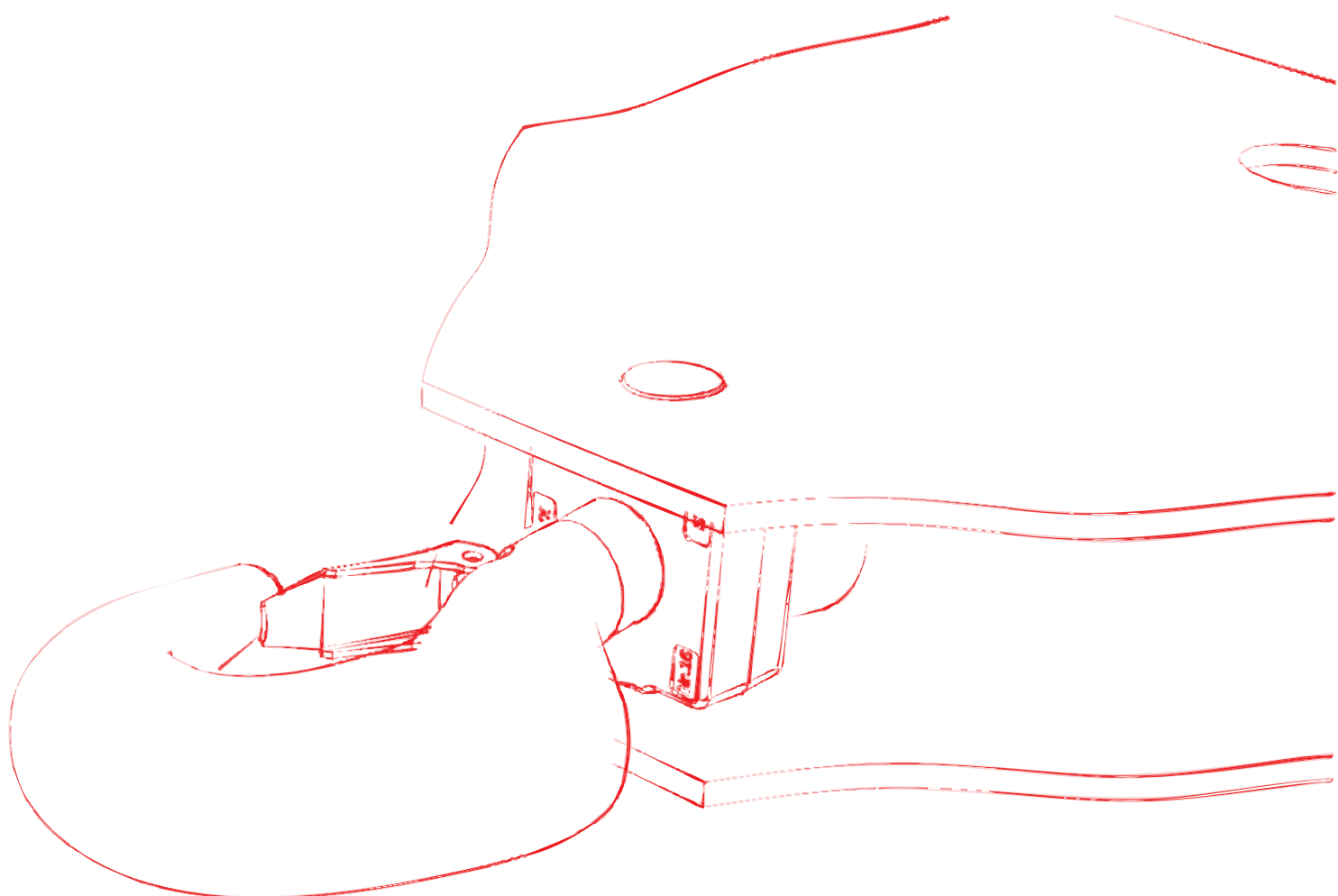


Technical Information

System component

WOLFF Tower Elements



Original operating manual

German

English



Published by

WOLFFKRAN GmbH

Austraße 72

74076 Heilbronn

Germany

Phone +49 7131 9815 0

Fax +49 7131 9815 355

www.wolffkran.com

info@wolffkran.de

Copyright

This documentation including all of its subsections is protected by copyright laws.

Any type of use or modification outside of the stringent limits of the copyright laws without permission of WOLFFKRAN GmbH is prohibited and subject to penalties.

This applies particularly for copying, translation, microfilming and storage and processing in electronic systems.

At the time of printing, the information, data, illustrations and notes comprised in this manual were up-to-date.


Subject to change of design, error and typos.

Table of contents


1 Applications with long tower elements.....	1 / 1
2 Tower element TFS 12 (1.2 m tower system).....	2 / 1
3 Tower element TFS 12 LC (1.2 m tower system).....	3 / 1
4 Tower element TFSÜ 12 (1.2 m - 1.5 m tower system).....	4 / 1
5 Tower element TFS 15.4 (1.5 m tower system).....	5 / 1
6 Tower element UVA 15.4 (1.5 m tower system).....	6 / 1
7 Tower element UV 15.6 NC (1.5 m tower system).....	7 / 1
8 Tower element UV 15.4 L (1.5 m tower system).....	8 / 1
9 Tower element UVÜ 15.4 (1.5 m - 2.0 m tower system).....	9 / 1
10 Tower element TVA 15.6 (1.5 m tower system).....	10 / 1
11 Tower element TV 15.6 K (1.5 m tower system).....	11 / 1
12 Tower element TV 15.6 (1.5 m tower system).....	12 / 1
13 Tower element TV 15.6 LC (1.5 m tower system).....	13 / 1
14 Tower element TV 15.6 L (1.5 m tower system).....	14 / 1
15 Tower element TVÜ 15.6 (1.5 m - 2.0 m tower system).....	15 / 1
16 Transition tower system 1.5 m - 2.0 m (transition element TVR 2015.1).....	16 / 1
17 Tower element UVA 20.4 (2.0 m tower system).....	17 / 1
18 Tower element UV 20.6 NC (2.0 m tower system).....	18 / 1
19 Tower element UV 20.6 L (2.0 m tower system).....	19 / 1
20 Tower element TVA 20.6 (2.0 m tower system).....	20 / 1
21 Tower element TV 20.6 (2.0 m tower system).....	21 / 1
22 Tower element TV 20.4 K (2.0 m tower system).....	22 / 1
23 Tower element TV 20.6 L (2.0 m tower system).....	23 / 1
24 Tower element TVÜ 20-23 (2.0 m - 2.3 m tower system).....	24 / 1
25 Transition tower system 2.0 m - 2.3 m (Joining frame VR 2023.1).....	25 / 1
26 Tower element HT 23 (2.3 m tower system).....	26 / 1
27 Tower element BT 23 (2.3 m tower system).....	27 / 1
28 Tower element BT 23 S (2.3 m tower system).....	28 / 1
29 Transition tower system 2.5 m - 2.3 m (Joining frame VR 2523).....	29 / 1
30 Transition tower system 2.3 m / 2.5 m – 2.9 m suitable for UV 29 tower elements (joining frame VR 23/25-29).....	30 / 1
31 Transition tower system 2.3 m / 2.5 m – 2.9 m suitable for TV 29 tower elements (joining frame VR 23/25-29.1).....	31 / 1

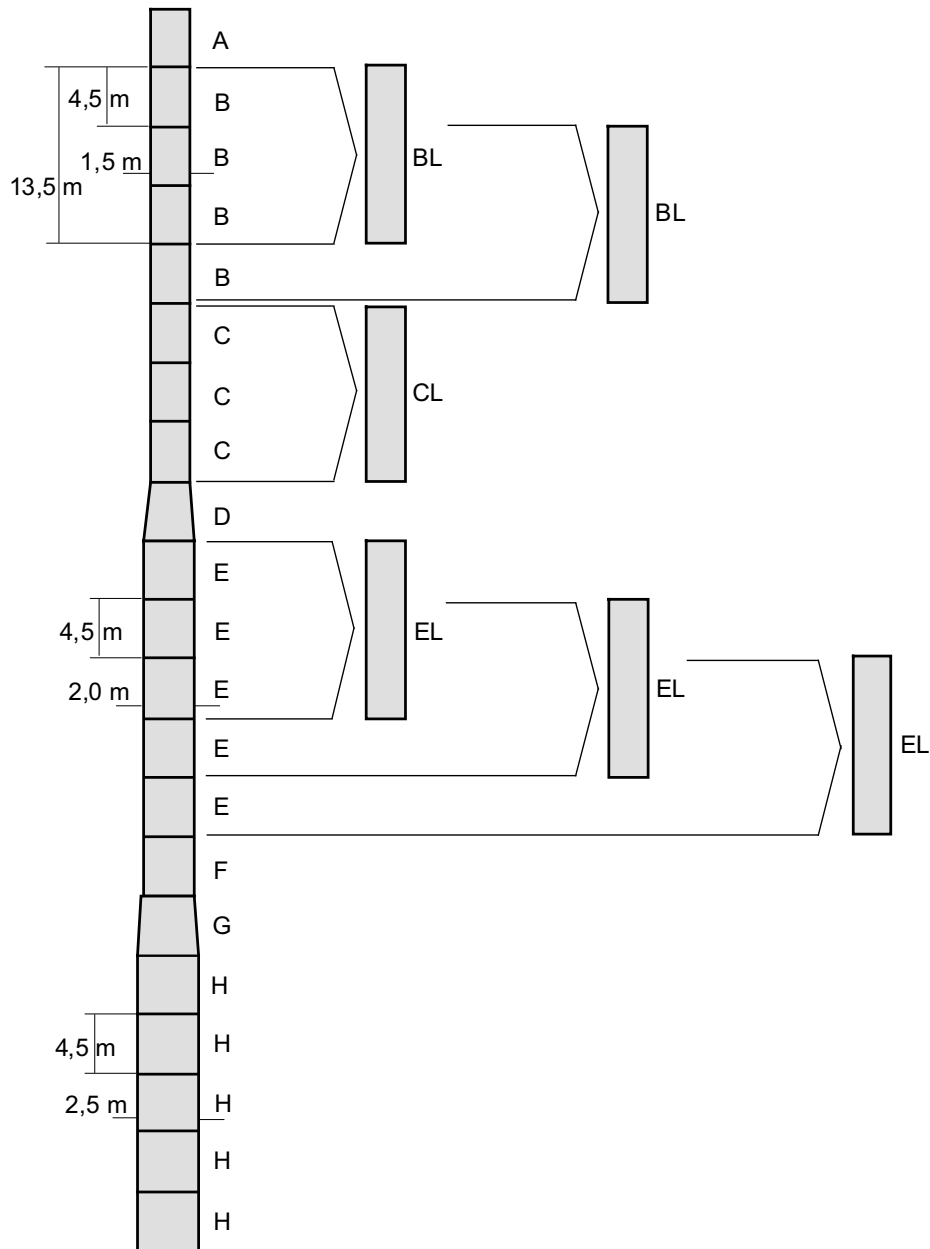
32 Tower element UV 29 (2.9 m tower system).....	32 / 1
33 Tower element BT 29 (2.9 m tower system).....	33 / 1
34 Tower element TVA 29 (2.9 m tower system)	34 / 1
35 Tower element TV 29.1 (2.9 m tower system)	35 / 1
36 Transition tower system 2.9 m - 3.3 m (Joining frame VR 2933)	36 / 1
37 Tower element TV 33-5 (3.3 m tower system).....	37 / 1
38 Technical data	38 / 1
39 Technical data	39 / 1
40 Technical data	40 / 1

1 Applications with long tower elements

	NOTICE
	<p>Long tower elements are not available for all of the 4.5 m tower elements and cannot be replaced with these. However, have the option of using long tower elements of a higher grade (e.g. UT 20 replaced with UV 20.4 L). In this case, it is usually required to insert additional platforms.</p>

The diagram below shows where you can install long tower elements.

	NOTICE
	<p>The letters A to H are placeholders for any WOLFF tower element. The same letter means the same tower element.</p>



Applications with long tower elements

2 Tower element TFS 12 (1.2 m tower system)

Tower element		TFS 12	Figure
Weight			
Tower element	kg	1995	
Dimensions			
a	mm	1220	
b	mm	120	
c	mm	98	
d	mm	93	
e	mm	-	
f	mm	-	
g*	mm	5750	
h	mm	6035	
s1	mm	-	
s / s2	mm	1080	
Ø1	mm	50	
Ø2	mm	50	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 50x220		
Order number	30000003		
L	mm	220	
m	mm	50	
n	mm	155	
Quantity	8		
Spring retainer	6/50		
Order number	10005518		
Ø	mm	6	
Quantity	16		

This page was intentionally left blank!

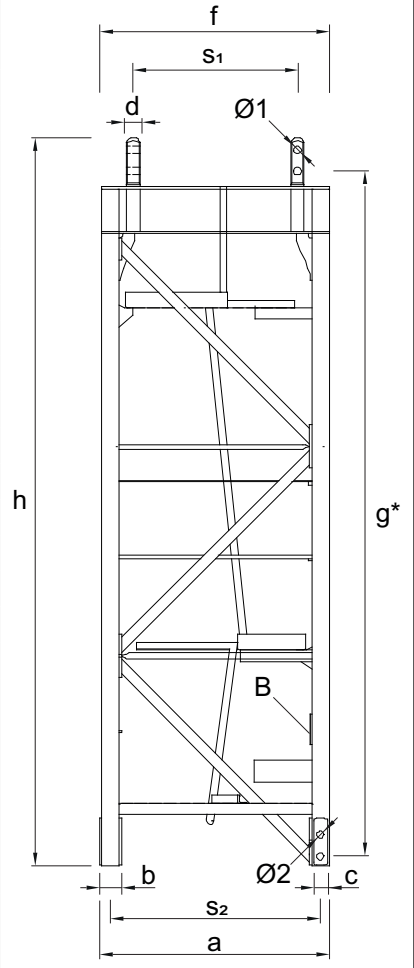
3 Tower element TFS 12 LC (1.2 m tower system)

Tower element		TFS 12 LC	Figure
Weight			
Tower element	kg	2910	
Dimensions			
a	mm	1220	
b	mm	120	
c	mm	98	
d	mm	93	
e	mm	-	
f	mm	-	
g*	mm	11500	
h	mm	11785	
s1	mm	-	
s / s2	mm	1080	
Ø1	mm	50	
Ø2	mm	50	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 50x220		
Order number	30000003		
L	mm	220	
m	mm	50	
n	mm	155	
Quantity	8		
Spring retainer	6/50		
Order number	10005518		
Ø	mm	6	
Quantity	16		

This page was intentionally left blank!

4 Tower element TFSÜ 12 (1.2 m - 1.5 m tower system)

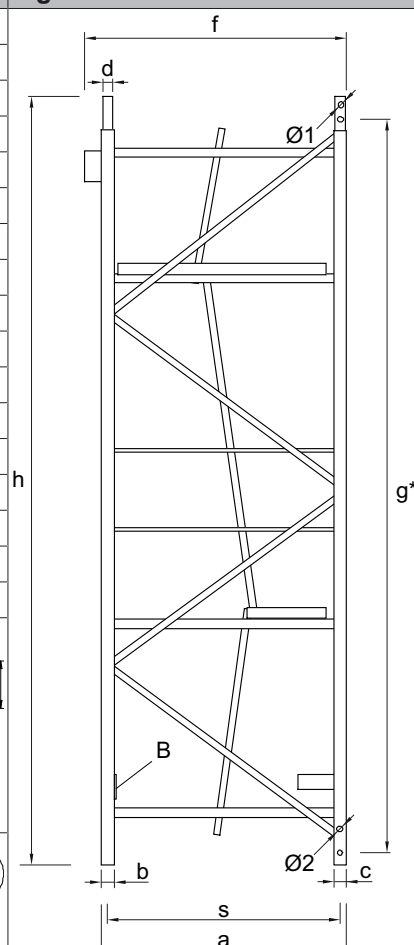
Tower element		TFSÜ 12		Figure	
Weight					
Tower element	kg	1655			
Dimensions					
a	mm	1520			
b	mm	120			
c	mm	98			
d	mm	93			
e	mm	-			
f	mm	-			
g*	mm	4500			
h	mm	4785			
s1	mm	1080			
s / s2	mm	1379			
Ø1	mm	50			
Ø2	mm	50			
* system dimensions B = component identifier					
Tower connection		top	TFS 12		
		bottom	TFS 15		
Securing elements					
Bolt		Ø 50x220			
Order number		30000003			
L	mm	220			
m	mm	50			
n	mm	155			
Quantity		8			
Spring retainer		6/50			
Order number		10005518			
Ø	mm	6			
Quantity		16			



This page was intentionally left blank!

5 Tower element TFS 15.4 (1.5 m tower system)

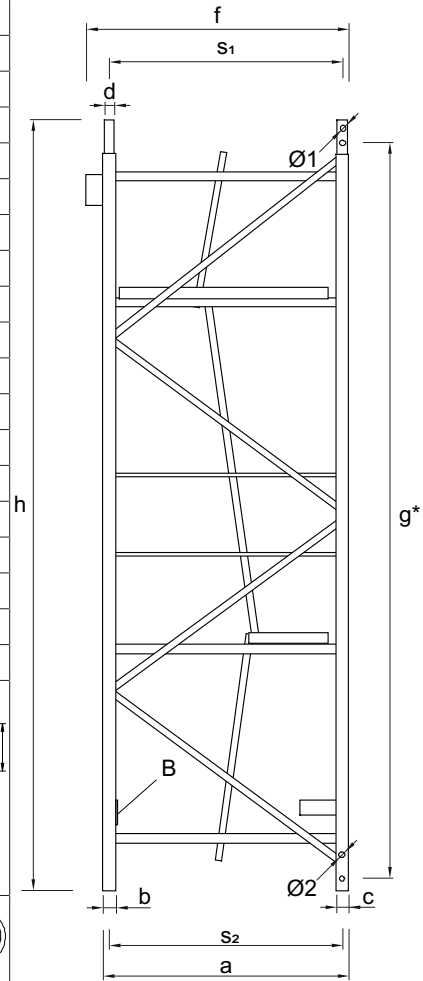
Tower element		TFS 15.4		Figure	
Weight					
Tower element	kg	1455			
Dimensions					
a	mm	1520			
b	mm	121			
c	mm	98			
d	mm	93			
e	mm	-			
f	mm	1620			
g*	mm	4500			
h	mm	4785			
s1	mm	-			
s / s2	mm	1379			
Ø1	mm	50			
Ø2	mm	50			
* system dimensions B = component identifier					
Securing elements					
Bolt	Ø 50x220				
Order number	30000003				
L	mm	220			
m	mm	50			
n	mm	155			
Quantity	8				
Spring retainer	6/50				
Order number	10005518				
Ø	mm	6			
Quantity	16				



This page was intentionally left blank!

6 Tower element UVA 15.4 (1.5 m tower system)

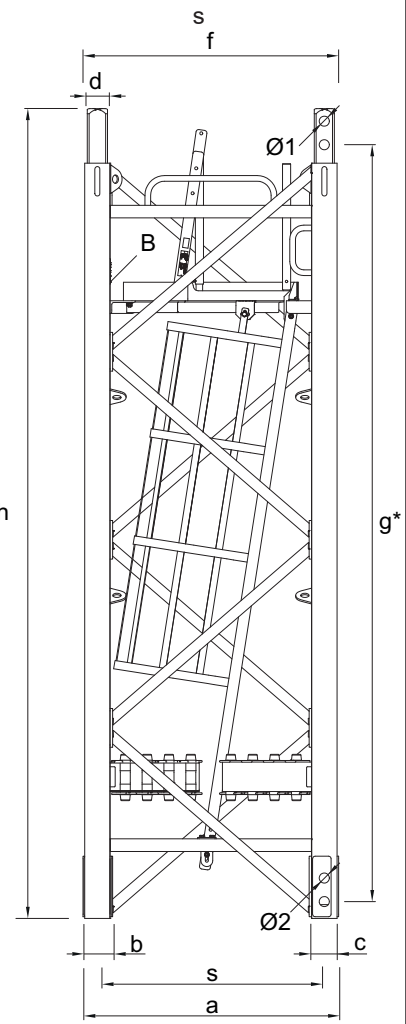
Tower element		UVA 15.4		Figure	
Weight					
Tower element	kg	1720			
Dimensions					
a	mm	1520			
b	mm	151			
c	mm	126			
d	mm	93			
e	mm	-			
f	mm	1610			
g*	mm	4500			
h	mm	4785			
s1	mm	1379			
s / s2	mm	1349			
Ø1	mm	50			
Ø2	mm	60			
* system dimensions B = component identifier					
Tower connection		top	TFS 15.4		
		bottom	UV 15.4		
Securing elements					
Bolt		Ø 60x275			
Order number		30000002			
L	mm	275			
m	mm	60			
n	mm	192			
Quantity		8			
Spring retainer		10/60-80			
Order number		10005519			
Ø	mm	10			
Quantity		16			



This page was intentionally left blank!

7 Tower element UV 15.6 NC (1.5 m tower system)

Tower element		UV 15.6 NC		Figure	
Weight					
Tower element	kg	1770			
Dimensions					
a	mm	1520			
b	mm	151			
c	mm	126			
d	mm	120			
e	mm	-			
f	mm	1500			
g*	mm	4500			
h	mm	4815			
s1	mm	-			
s / s2	mm	1349			
Ø1	mm	60			
Ø2	mm	60			
* system dimensions B = component identifier					
Securing elements					
Bolt	Ø 60x275				
Order number	30000002				
L	mm	275			
m	mm	60			
n	mm	192			
Quantity	8				
Spring retainer	10/60-80				
Order number	10005519				
Ø	mm	10			
Quantity	16				



This page was intentionally left blank!

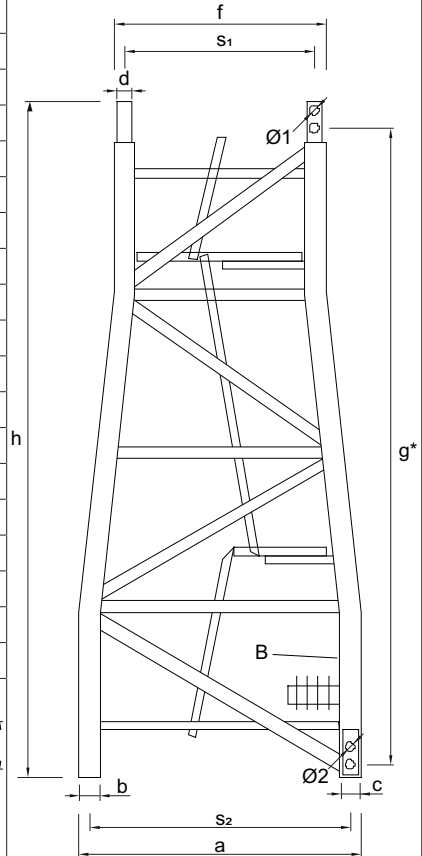
8 Tower element UV 15.4 L (1.5 m tower system)

Tower element		UV 15.4 L		Figure	
Weight					
Tower element	kg	4420			
Dimensions					
a	mm	1535			
b	mm	155			
c	mm	129			
d	mm	120			
e	mm	-			
f	mm	-			
g*	mm	13500			
h	mm	13815			
s1	mm	-			
s / s2	mm	1349			
Ø1	mm	60			
Ø2	mm	60			
* system dimensions B = component identifier					
Securing elements					
Bolt	Ø 60x275				
Order number	30000002				
L	mm	275			
m	mm	60			
n	mm	192			
Quantity	8				
Spring retainer	10/60-80				
Order number	10005519				
Ø	mm	10			
Quantity	16				

This page was intentionally left blank!

9 Tower element UVÜ 15.4 (1.5 m - 2.0 m tower system)

Tower element		UVÜ 15.4	Figure
Weight			
Tower element	kg	2260	
Dimensions			
a	mm	2200	
b	mm	151	
c	mm	126	
d	mm	118	
e	mm	-	
f	mm	1500	
g*	mm	4500	
h	mm	4815	
s1	mm	1349	
s / s2	mm	1849	
Ø1	mm	60	
Ø2	mm	60	
* system dimensions B = component identifier			
Tower connection		top	UV 15.4
		bottom	UV 20.4
Securing elements			
Bolt		Ø 60x275	
Order number		30000002	
L	mm	275	
m	mm	60	
n	mm	192	
Quantity		8	
Spring retainer		10/60-80	
Order number		10005519	
Ø	mm	10	
Quantity		16	



This page was intentionally left blank!

10 Tower element TVA 15.6 (1.5 m tower system)

Tower element		TVA 15.6	Figure	
Weight				
Tower element	kg	2890		
Dimensions				
a	mm	1530		
b	mm	182		
c	mm	147		
d	mm	118		
e	mm	-		
f	mm	1625		
g*	mm	4500		
h	mm	4815		
s1	mm	1346		
s / s2	mm	1318		
Ø1	mm	60		
Ø2	mm	70		
* system dimensions B = component identifier				
Tower connection		top		UV 15.6
		bottom		TV 15.6
Securing elements				
Bolt		Ø 70x295		
Order number		30000001		
L	mm	295		
m	mm	70		
n	mm	228		
Quantity		8		
Spring retainer		10005519		
Order number		10/60-80		
Ø	mm	10		
Quantity		16		

This page was intentionally left blank!

11 Tower element TV 15.6 K (1.5 m tower system)

Tower element		TV 15.6 K		B = component identifier
Weight	kg	1770		
Dimensions				
a	mm	1530		
b	mm	182		
c	mm	147		
d	mm	140		
e	mm	-		
f	mm	-		
g*	mm	2250		
h	mm	2590		
s ₁	mm	-		
s / s ₂	mm	1318		
Ø1	mm	70		
Ø2	mm	70		
* System dimensions				
Bolt				
Order no.		30000001		
L	mm	295		
m	mm	70		
n	mm	228		
Quantity		8		
Spring retainer				
Order no.		10024804		
Ø3	mm	10		
Ø4	mm	60-80		
Quantity		16		

This page was intentionally left blank!

12 Tower element TV 15.6 (1.5 m tower system)

Tower element		TV 15.6	Figure
Weight			
Tower element	kg	2910	
Dimensions			
a	mm	1530	
b	mm	182	
c	mm	147	
d	mm	140	
e	mm	-	
f	mm	1625	
g*	mm	4500	
h	mm	4840	
s1	mm	-	
s / s2	mm	1318	
Ø1	mm	70	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x295		
Order number	30000001		
L	mm	295	
m	mm	70	
n	mm	228	
Quantity	8		
Spring retainer	10005519		
Order number	10/60-80		
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

13 Tower element TV 15.6 LC (1.5 m tower system)

Tower element		TV 15.6 LC		B = component identifier
Weight	kg	6475		
Dimensions				
a	mm	1530		
b	mm	182		
c	mm	147		
d	mm	140		
e	mm	-		
f*	mm	-		
g	mm	11250		
h	mm	11590		
s ₁	mm	-		
s / s ₂	mm	1318		
Ø1	mm	70		
Ø2	mm	70		
* System dimensions				
Bolt				
Order no.		30000001		
L	mm	295		
m	mm	70		
n	mm	228		
Quantity		8		
Spring retainer				
Order no.		10005519		
Ø3	mm	10		
Ø4	mm	60-80		
Quantity		16		

This page was intentionally left blank!

14 Tower element TV 15.6 L (1.5 m tower system)

Tower element		TV 15.6 L	Figure	
Weight				
Tower element	kg	7580		
Dimensions				
a	mm	1530		
b	mm	182		
c	mm	147		
d	mm	140		
e	mm	-		
f	mm	-		
g*	mm	13500		
h	mm	13840		
s1	mm	-		
s / s2	mm	1318		
Ø1	mm	70		
Ø2	mm	70		
* system dimensions B = component identifier				
Securing elements				
Bolt	Ø 70x295			
Order number	30000001			
L	mm	295		
m	mm	70		
n	mm	228		
Quantity	8			
Spring retainer	10005519			
Order number	10/60-80			
Ø	mm	10		
Quantity	16			

This page was intentionally left blank!

15 Tower element TVÜ 15.6 (1.5 m - 2.0 m tower system)

Tower element		TVÜ 15.6	Figure	
Weight				
Tower element	kg	4140		
Dimensions				
a	mm	2064		
b	mm	216		
c	mm	176		
d	mm	140		
e	mm	-		
f	mm	1564		
g*	mm	4500		
h	mm	4850		
s1	mm	1318		
s / s2	mm	1818		
Ø1	mm	70		
Ø2	mm	70		
* system dimensions B = component identifier				
Tower connection		top		TV 15.6
		bottom		TV 20.6
Securing elements				
Bolt		Ø 70x326		
Order number		30000000		
L	mm	326		
m	mm	70		
n	mm	262		
Quantity		8		
Linch pin		10x100		
Order number		10024804		
Ø	mm	10		
Quantity		16		

This page was intentionally left blank!

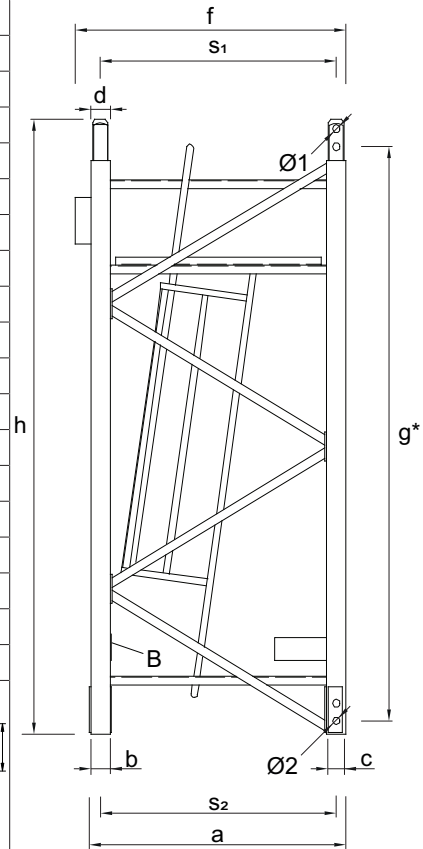
16 Transition tower system 1.5 m - 2.0 m (transition element TVR 2015.1)

Tower element		TVR 2015.1		B = component identifier
Weight	kg	4425		
Dimensions				
a	mm	1525		
b	mm	207		
c	mm	147		
d	mm	120		
e	mm	2031		
f	mm	2071		
g*	mm	4500		
h	mm	4815		
s ₁	mm	1849		
s / s ₂	mm	1318		
Ø1	mm	60		
Ø2	mm	70		
* System dimensions				
Bolt				
Order no.		30000000		
L	mm	326		
m	mm	70		
n	mm	262		
Quantity		8		
Linch pin				
Order no.		10024804		
Ø	mm	10		
L	mm	100		
Quantity		16		

This page was intentionally left blank!

17 Tower element UVA 20.4 (2.0 m tower system)

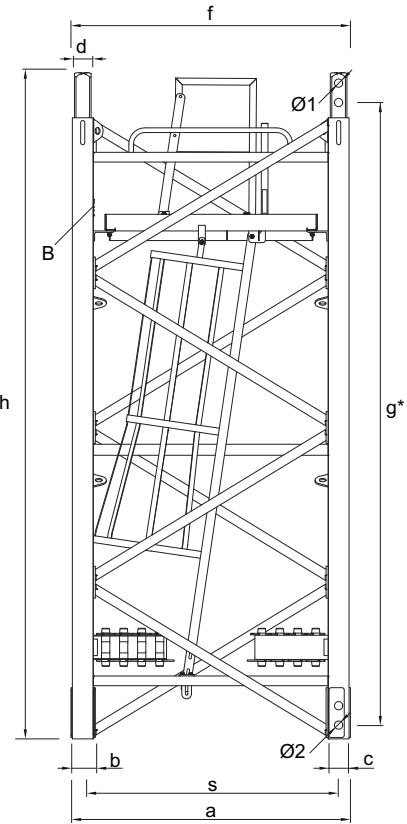
Tower element		UVA 20.4		Figure	
Weight					
Tower element	kg	1985			
Dimensions					
a	mm	2020			
b	mm	151			
c	mm	126			
d	mm	93			
e	mm	-			
f	mm	2130			
g*	mm	4500			
h	mm	4785			
s1	mm	1879			
s / s2	mm	1849			
Ø1	mm	50			
Ø2	mm	60			
* system dimensions B = component identifier					
Tower connection		top	TFS 20.4		
		bottom	UV 20.4		
Securing elements					
Bolt		Ø 60x275			
Order number		30000002			
L	mm	275			
m	mm	60			
n	mm	192			
Quantity		8			
Spring retainer		10/60-80			
Order number		10005519			
Ø	mm	10			
Quantity		16			



This page was intentionally left blank!

18 Tower element UV 20.6 NC (2.0 m tower system)

Tower element		UV 20.6 NC		Figure	
Weight					
Tower element	kg	2075			
Dimensions					
a	mm	2020			
b	mm	151			
c	mm	126			
d	mm	120			
e	mm	-			
f	mm	2000			
g*	mm	4500			
h	mm	4815			
s1	mm	-			
s / s2	mm	1849			
Ø1	mm	60			
Ø2	mm	60			
* system dimensions B = component identifier					
Securing elements					
Bolt	Ø 60x275				
Order number	30000002				
L	mm	275			
m	mm	60			
n	mm	192			
Quantity	8				
Spring retainer	10/60-80				
Order number	10005519				
Ø	mm	10			
Quantity	16				



This page was intentionally left blank!

19 Tower element UV 20.6 L (2.0 m tower system)

Tower element		UV 20.6 L		Figure	
Weight					
Tower element	kg	5753			
Dimensions					
a	mm	2024			
b	mm	155			
c	mm	129			
d	mm	120			
e	mm	-			
f	mm	-			
g*	mm	13500			
h	mm	13815			
s1	mm	-			
s / s2	mm	1849			
Ø1	mm	60			
Ø2	mm	60			
* system dimensions B = component identifier					
Securing elements					
Bolt	Ø 60x275				
Order number	30000002				
L	mm	275			
m	mm	60			
n	mm	192			
Quantity	8				
Spring retainer	10/60-80				
Order number	10005519				
Ø	mm	10			
Quantity	16				

This page was intentionally left blank!

20 Tower element TVA 20.6 (2.0 m tower system)

Tower element		TVA 20.6		Figure	
Weight					
Tower element	kg	3175			
Dimensions					
a	mm	2030			
b	mm	212			
c	mm	147			
d	mm	118			
e	mm	-			
f	mm	2135			
g*	mm	4500			
h	mm	4815			
s1	mm	1846			
s / s2	mm	1818			
Ø1	mm	60			
Ø2	mm	70			
* system dimensions B = component identifier					
Tower connection		top	UV 20.6		
		bottom	TV 20.6		
Securing elements					
Bolt		Ø 70x295			
Order number		30000001			
L	mm	295			
m	mm	70			
n	mm	228			
Quantity		8			
Spring retainer		10005519			
Order number		10/60-80			
Ø	mm	10			
Quantity		16			

This page was intentionally left blank!

21 Tower element TV 20.6 (2.0 m tower system)

Tower element		TV 20.6	Figure
Weight			
Tower element	kg	3050	
Dimensions			
a	mm	2030	
b	mm	182	
c	mm	147	
d	mm	140	
e	mm	-	
f	mm	2135	
g*	mm	4500	
h	mm	4840	
s1	mm	-	
s / s2	mm	1818	
Ø1	mm	70	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x295		
Order number	30000001		
L	mm	295	
m	mm	70	
n	mm	228	
Quantity	8		
Spring retainer	10005519		
Order number	10/60-80		
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

22 Tower element TV 20.4 K (2.0 m tower system)

Tower element		TV 20.4 K	Figure
Weight			
Tower element	kg	1875	
Dimensions			
a	mm	2030	
b	mm	182	
c	mm	147	
d	mm	140	
e	mm	-	
f	mm	-	
g*	mm	2250	
h	mm	2590	
s1	mm	-	
s / s2	mm	1818	
Ø1	mm	70	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x295		
Order number	30000001		
L	mm	295	
m	mm	70	
n	mm	228	
Quantity	8		
Linch pin	10x100		
Order number	10024804		
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

23 Tower element TV 20.6 L (2.0 m tower system)

Tower element		TV 20.6 L	Figure
Weight			
Tower element	kg	7945	
Dimensions			
a	mm	2030	
b	mm	182	
c	mm	147	
d	mm	140	
e	mm	-	
f	mm	-	
g*	mm	13500	
h	mm	13840	
s1	mm	-	
s / s2	mm	1818	
Ø1	mm	70	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x295		
Order number	30000001		
L	mm	295	
m	mm	70	
n	mm	228	
Quantity	8		
Spring retainer	10/60-80		
Order number	10005519		
Ø	mm	10	
Quantity	16		

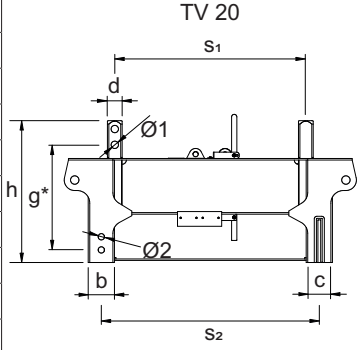
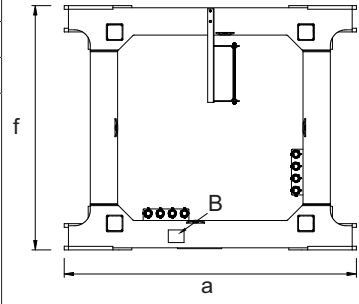
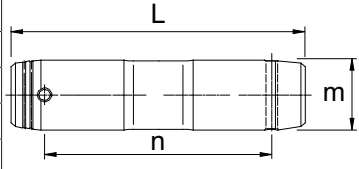
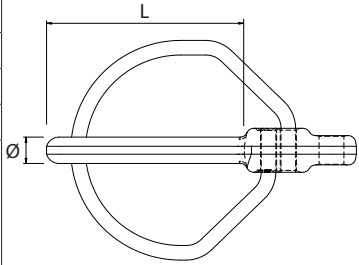
This page was intentionally left blank!

24 Tower element TVÜ 20-23 (2.0 m - 2.3 m tower system)

Tower element		TVÜ 20-23	Figure	
Weight				
Tower element	kg	4380		
Dimensions				
a	mm	2320		
b	mm	216		
c	mm	176		
d	mm	140		
e	mm	-		
f	mm	2034		
g*	mm	4500		
h	mm	4850		
s1	mm	1818		
s / s2	mm	2074		
Ø1	mm	70		
Ø2	mm	60		
* system dimensions B = component identifier				
Tower connection		top		TV 20
		bottom		HT 23
Securing elements				
Bolt		Ø 60x330		
Order number		30050624		
L	mm	330		
m	mm	60		
n	mm	266		
Quantity		8		
Linch pin		10x75		
Order number		10025012		
L	mm	75		
Ø	mm	10		
Quantity		16		

This page was intentionally left blank!

25 Transition tower system 2.0 m - 2.3 m (Joining frame VR 2023.1)

Tower element		VR 2023.1		B = component identifier
Weight	kg	2560		TV 20
Dimensions				
a	mm	2780		
b	mm	250		
c	mm	180		
d	mm	140		
e	mm	-		
f	mm	2324		
g*	mm	1000		
h	mm	1350		
s ₁	mm	1818		
s / s ₂	mm	2074		
Ø1	mm	70		
Ø2	mm	60		
* System dimensions				
Bolt				
Order no.		30050624		
L	mm	330		
m	mm	60		
n	mm	266		
Quantity		8		
Linch pin				
Order no.		10025012		
Ø	mm	10		
L	mm	75		
Quantity		16		
				
				
				

This page was intentionally left blank!

26 Tower element HT 23 (2.3 m tower system)

Tower element		HT 23	Figure
Weight			
Tower element	kg	3675	
Dimensions			
a	mm	2320	
b	mm	216	
c	mm	176	
d	mm	160x165	
e	mm	-	
f	mm	-	
g*	mm	4500	
h	mm	4840	
s1	mm	-	
s / s2	mm	2074	
Ø1	mm	60	
Ø2	mm	60	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 60x330		
Order number	30050624		
L	mm	330	
m	mm	60	
n	mm	266	
Quantity	8		
Linch pin	10x100		
Order number	10025012		
L	mm	100	
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

27 Tower element BT 23 (2.3 m tower system)

Tower element		BT 23	Figure
Weight			
Tower element	kg	11445	
Dimensions			
a	mm	2320	
b	mm	266	
c	mm	226	
d	mm	160x165.5	
e	mm	-	
f	mm	-	
g*	mm	11250	
h	mm	11590	
s1	mm	-	
s / s2	mm	2024	
Ø1	mm	60	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x380		
Order number	10024746		
L	mm	380	
m	mm	70	
n	mm	316	
Quantity	8		
Linch pin	10x100		
Order number	10024804		
L	mm	100	
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

28 Tower element BT 23 S (2.3 m tower system)

Tower element		BT 23 S	Figure
Weight			
Tower element	kg	11230	
Dimensions			
a	mm	2320	
b	mm	266	
c	mm	226	
d	mm	210x213	
e	mm	-	
f	mm	-	
g*	mm	11250	
h	mm	11630	
s1	mm	-	
s / s2	mm	2024	
Ø1	mm	70	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x380		
Order number	10025208		
L	mm	380	
m	mm	70	
n	mm	316	
Quantity	8		
Linch pin	10x100		
Order number	10024804		
L	mm	100	
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

29 Transition tower system 2.5 m - 2.3 m (Joining frame VR 2523)

Joining frame		VR 2523	B = component identifier
Weight	kg	3180	
Dimensions			
a	mm	2780	
b	mm	250	
c	mm	180	
d ¹	mm	140	
e	mm	2324	
f	mm	2300	
G*	mm	1020	
h	mm	452	
i	mm	1472	
¹ Bolted spigots		AZH 140 E10	
* System dimensions			
Bolt			
Order no.		30 050 624	
L	mm	330	
m	mm	60	
n	mm	266	
Quantity		8	
Linch pin			
Order no.		10 025 012	
Ø	mm	10	
L	mm	75	
Quantity		16	

This page was intentionally left blank!

30 Transition tower system 2.3 m / 2.5 m – 2.9 m suitable for UV 29 tower elements (joining frame VR 23/25-29)

Joining frame VR 23/25-29					B = component identifier
Weight [kg]	4275				
Dimension [mm]					
Tower system	TV 23	HT 23	TV 25	UV 25	
a	3550				
b	280				
c	220				
d*	140	160	140	156	
e	2860				
f	2940				
h*	452	487	452	462	
Ø 1	65				
Ø 2*	70	60	70	70	
System dimensions [mm]					
G	1200				
O*	2108	2074	2318	2298	
U	2580				
* varies depending on tower system					
Bolt					
Order no.	30038975				
L	mm	380			
m	mm	65			
n	mm	297			
Quantity	8				
Linch pin					
Order no.	10024804				
Ø	mm	10			
L	mm	100			
Quantity	16				

Accessories	VR 23/25-29		Hole pattern
Set of bolted spigots	Tower system	Order no.	
AZ 140 E 17	TV 23	30049645	
AZ 160 HT 23	HT 23	30049646	
AZ 140 E 10	TV 25	30049643	
AZ 156 M	UV 25	30049644	

This page was intentionally left blank!

31 Transition tower system 2.3 m / 2.5 m – 2.9 m suitable for TV 29 tower elements (joining frame VR 23/25-29.1)

Joining frame VR 23/25-29.1					B = component identifier	
Weight [kg] (without adapter frame and bolted spigots)		4650			TV/HT 23 UV/TV 25	
Weight [kg] adapter frame		1700				
Dimension [mm]						
Tower system	TV 23	HT 23	TV 25	UV 25		
a	3550					
b	265					
c	225					
d*	140	160	140	156		
e	2830					
f	2940					
g	1110					
h*	452	487	452	462		
Ø 1	70	60	70	70		
Ø 2*	70					
System dimensions [mm]						
G	1200					
O*	2108	2074	2318	2298		
U	2565					
Bolt						
Order no.		10024746				
L	mm	380				
m	mm	70				
n	mm	316				
Quantity		16				
Securing elements						
		Linch pin		Cotter pin		
Order no.		10024804		10006073		
Ø	mm	10		10		
L	mm	100		90		
Quantity		16		16		

* varies depending on tower system

Set of bolted spigots				
Item	Weight	Tower system	Order no.	Hole pattern
AZ 140 E 17	875 kg	TV 23	30049645	
AZ 160 M HT 23	905 kg	HT 23	30049646	
AZ 140 E 10	790 kg	TV 25	30049643	
AZ 156 M	844 kg	UV 25	30049644	

This page was intentionally left blank!

32 Tower element UV 29 (2.9 m tower system)

Tower element		UV 29	Figure
Weight			
Tower element	kg	4575	
Dimensions			
a	mm	2860	
b	mm	250	
c	mm	218	
d	mm	200x208	
e	mm	-	
f	mm	-	
g*	mm	4500	
h	mm	4850	
s1	mm	-	
s / s2	mm	2580	
Ø1	mm	65	
Ø2	mm	65	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 65x380		
Order number	30038975		
L	mm	380	
m	mm	65	
n	mm	297	
Quantity	8		
Spring retainer	10/60-80		
Order number	10005519		
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

33 Tower element BT 29 (2.9 m tower system)

Tower element		BT 29		Figure
Weight				<p>The figure shows a side view and a top view of the tower element BT 29. The side view illustrates a vertical lattice structure with a central vertical member and diagonal bracing. Dimensions include: 'd' for the top flange thickness, 'f' for the top flange width, 'h' for the total height, 'g*' for the height to the top of the lattice, 'a' for the total width at the base, 's' for the width of the lattice section, 'b' and 'c' for the base flange dimensions, and 'B' for a component identifier. The top view shows a circular lattice structure with 16 holes of diameter 33 mm. It includes diameters: 'Ø 245' for the inner circle, 'Ø 360' for the middle circle, and 'Ø 430' for the outer circle.</p>
Tower element	kg	9175		
Dimensions				
a	mm	3010		
b	mm	430		
c	mm	-		
d	mm	200x208		
e	mm	-		
f	mm	-		
g*	mm	10000		
h	mm	10350		
s1	mm	-		
s / s2	mm	2580		
Ø1	mm	65		
Ø2	mm	-		
* system dimensions B = component identifier				

This page was intentionally left blank!

34 Tower element TVA 29 (2.9 m tower system)

Tower element		TVA 29		Figure
Weight				
Tower element	kg	6120		
Dimensions				
a	mm	2860		
b	mm	295		
c	mm	225		
d	mm	200x208		
e	mm	-		
f	mm	-		
g*	mm	4500		
h	mm	4850		
s1	mm	2565		
s / s2	mm	2580		
Ø1	mm	65		
Ø2	mm	70		
* system dimensions B = component identifier				
Tower connection		top	UV 29	
		bottom	TV 29	
Securing elements				
Bolt		Ø 70x400		
Order number		10032472		
L	mm	400		
m	mm	70		
n	mm	316		
Quantity		8		
Spring retainer		10/60-80		
Order number		10005519		
Ø	mm	10		
Quantity		16		

This page was intentionally left blank!

35 Tower element TV 29.1 (2.9 m tower system)

Tower element		TV 29.1	Figure
Weight			
Tower element	kg	5305	
Dimensions			
a	mm	2860	
b	mm	265	
c	mm	225	
d	mm	210x210	
e	mm	-	
f	mm	-	
g*	mm	4500	
h	mm	4865	
s1	mm	-	
s / s2	mm	2565	
Ø1	mm	70	
Ø2	mm	70	
* system dimensions B = component identifier			
Securing elements			
Bolt	Ø 70x400		
Order number	10032472		
L	mm	400	
m	mm	70	
n	mm	316	
Quantity	8		
Spring retainer	10/60-80		
Order number	10005519		
Ø	mm	10	
Quantity	16		

This page was intentionally left blank!

36 Transition tower system 2.9 m - 3.3 m (Joining frame VR 2933)

Joining frame		VR 2933	B = component identifier
Weight (without bolted spigots)	kg	8140	
Dimensions			
a	mm	3370	
b	mm	537	
c ¹	mm	210	
d	mm	1760	
Ø	mm	70	
F*	mm	2853	
G*	mm	2037	
H*	mm	2565	
¹ Bolted spigots			
* System dimensions			
Threaded bolts			
Order no.		30025249	
m	mm	610	
n	mm	M90 x 4	
Quantity		8	
Expansion sleeves			
Order no.		30025245	
Ø	mm	199 x 100	
Quantity		8	
collar nut			
Order no.		30025247	
Dimensions	mm	M 90 x 4	
Quantity		16	

Set of bolted spigots			
Item	Weight	Tower system	Order no.
AZ 210 VR 2933	1720 kg	TV 29	30054404

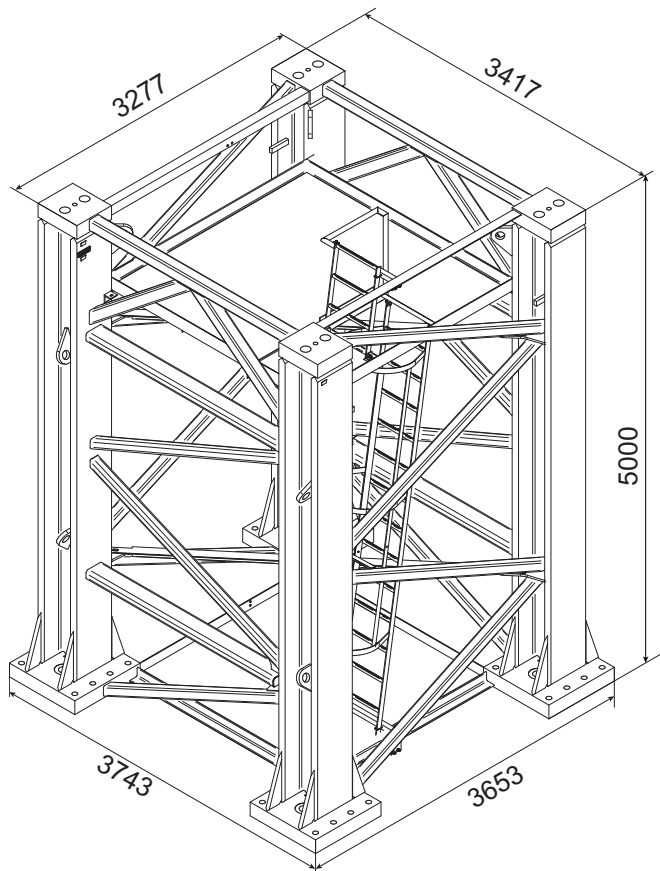
This page was intentionally left blank!

37 Tower element TV 33-5 (3.3 m tower system)

Tower element		TV 33-5	Figure
Weight			
Tower element	kg	10000	
Dimensions			
a	mm	3250x3330	
b	mm	397x400	
c	mm	-	
d	mm	-	
e	mm	-	
f	mm	-	
g*	mm	5000	
h	mm	5000	
s1	mm	-	
s / s2	mm	2853x2943	
Ø1	mm	-	
Ø2	mm	-	
* system dimensions B = component identifier			
Securing elements			
Threaded bolts		M90x4x610	
Order number		30025249	
m	mm	610	
n	mm	M90x4	
Quantity		8	
Extension sleeve		Ø 199/158x100	
Order number		30025245	
Dimensions	mm	199/185x100	
Quantity		8	
Flanged nut		M90x4	
Order number		30025247	
Dimensions		M90x4	
Quantity		16	
Dowel pin		DIN1481 40x90	
Order number		30025244	
Dimensions		DIN 1481 40x90-55SI7	
Quantity		4	

This page was intentionally left blank!

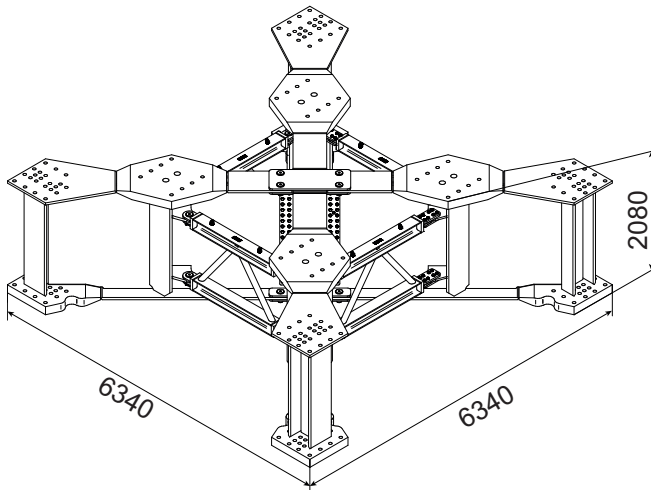
38 Technical data



System height	5000 mm
upper connection	VR 3360
lower connection	TV 33.5
Weight	19520 kg

This page was intentionally left blank!

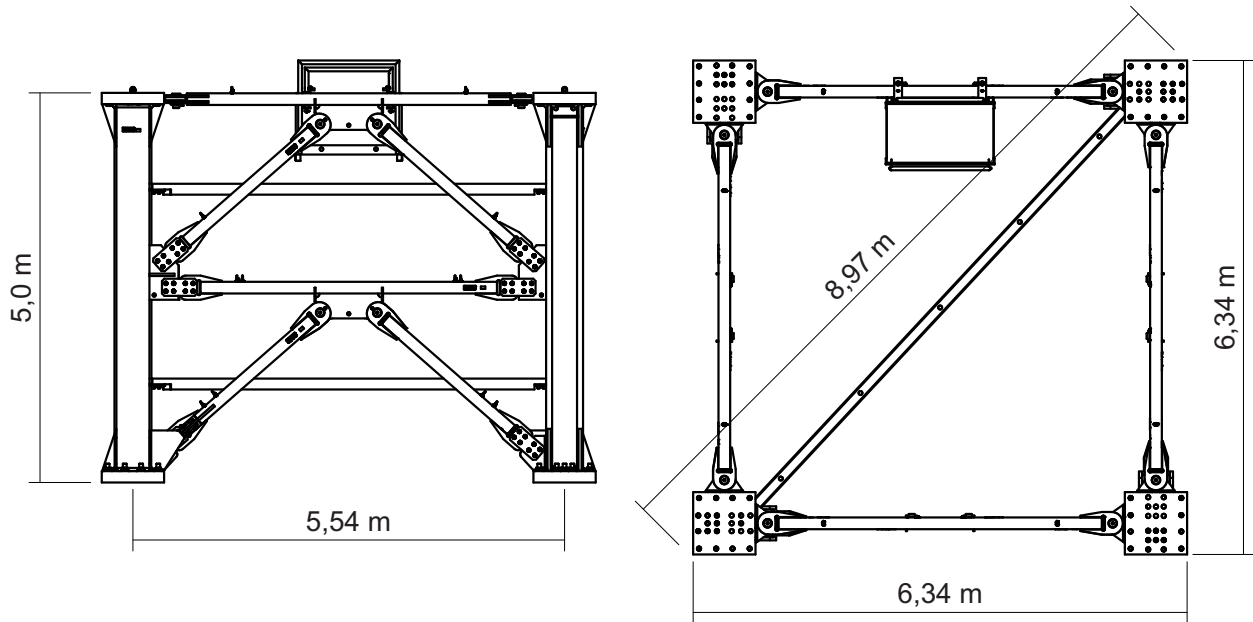
39 Technical data



System height	2.08 m
upper connection	TV 60
lower connection	TV 33.5 S
Weight	32260 kg

This page was intentionally left blank!

40 Technical data



System dimensions	5.54m x 5.54m
System height	5.0 m
Corner distance	8.97 m
Outside dimensions	6.34m x 6.34m
Weight	29485 kg

This page was intentionally left blank!

This page was intentionally left blank!

WOLFFKRAN Group

Headquarter international:

WOLFFKRAN AG

Hinterbergstrasse 17

CH-6330 Cham

Switzerland

Phone +41 41 766 85 00

Fax +41 41 766 85 99

info@wolffkran.com

Manufacturing:

WOLFFKRAN GmbH

Austraße 72

D-74076 Heilbronn

Germany

Phone + 49 7131 9815 0

Fax + 49 7131 9815 355

info@wolffkran.de

WOLFFKRAN Werk Brandenburg GmbH

Frederik-Ipsen-Straße 5

D-15926 Luckau OT Altno

Germany

Phone + 49 35456 674 0

Fax + 49 35456 674 200

info@wolffkran.de