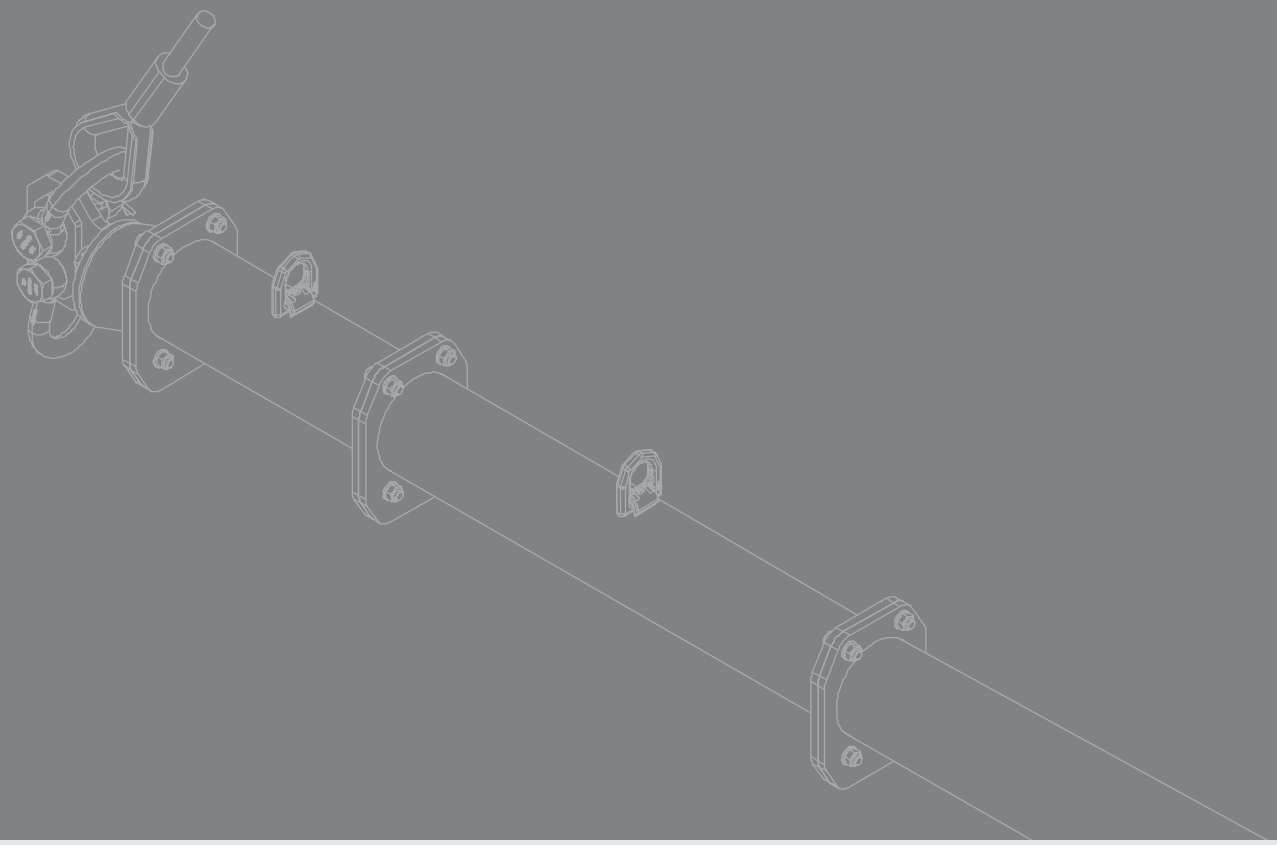


HI SB 015

Modular spreader system

User Manual

HI SB 015

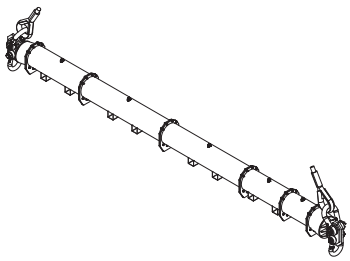
Modular spreader system

User Manual

Introduction

The HI SB 015 is a spreader system designed for carrying loads. The HI SB 015 may only be assembled and used by suitably skilled staff. This user manual tells you the correct way to assemble the HI SB 015 in the desired configuration and how you can use it safely. Always keep this user manual in a safe place near the HI SB 015.

Figure 1 – Overview of the HI SB 015



Product Description

The HI SB 015 has a modular construction and it comprises a set of end units, associated shackles and various struts. The lengths of the struts vary from half a meter to six metres. See Figure 1, Figure 2 and Table 1 for more information about the various parts.

Figure 2 – Components of the HI SB 015

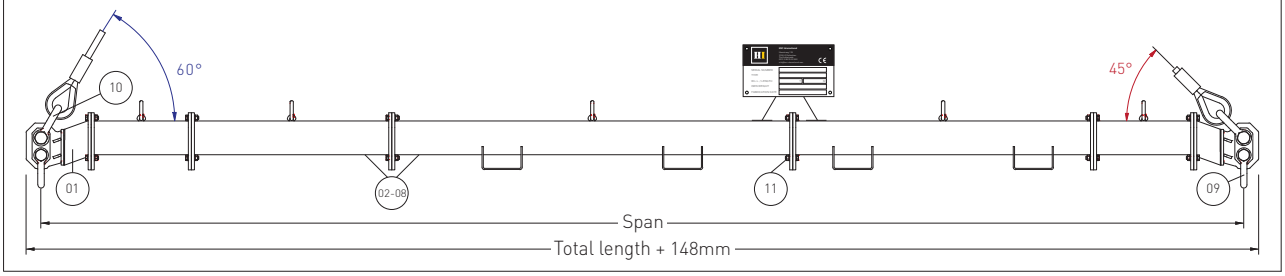


Table 1 - Components

#	Type	Description	Specifications	Weight (kg)	Qty
01	HI SB 015 00	HI End unit	0,25m	18	2
02	HI SB 015 05	HI Strut	0,50m	19	*
03	HI SB 015 10	HI Strut	1m	29	*
04	HI SB 015 20	HI Strut	2m	54	*
05	HI SB 015 30	HI Strut	3m	74	*
06	HI SB 015 40	HI Strut	4m	94	*
07	HI SB 015 50	HI Strut	5m	114	*
08	HI SB 015 60	HI Strut	6m	134	*
09	G-4163	Green Pin shackle	WLL 12t	4,91	2
10	G-4163	Green Pin shackle	WLL 13,5t	6,54	2
11	Grade 8.8	Bolts, Nuts and Washers	M16x55	4 pcs per connection	

*Depending on the configuration.

Safety Instructions

- Use the hoisting eyes at the tops of the strut or end unit only for moving a single component.
- Never use the HI SB 015 if the information on the documents supplied with it does not match the data on the identification plate.
- Never exceed the working load limit. See Table 2 for additional information.
- Never use less than the mandatory minimum sling length. See Table 2 for more information.
- Never use the HI SB 015 if the angle of the lower slings is more than 6 degrees from perpendicular.
- Always use suitable and certified slings.
- Use ropes to guide the load while it is being moved.
- Never use the HI SB 015 for lifting people.
- Never use the HI SB 015 if the annual inspection has not taken place or if it has expired. Make sure that the HI SB 015 is inspected and declared to be safe at least annually by a certified inspector of hoisting equipment.
- Never make alterations to the HI SB 015. Modifications can have consequences for safety.
- Never suspend loads from the struts or the flanges of the HI SB 015.
- Observe the locally applicable legislation and regulations about the use of the crane from which the HI SB 015 is suspended.

Assembly

1. Lay out the struts with the longest strut in the middle in the desired configuration on a flat and clean surface.
2. Connect up each flange using 4 pcs. M16x55 8.8 bolts, nuts and washers.
3. Tighten the bolts in stages, using a diagonal pattern. See Figure 3 for additional information. Use the tightening torques
   - Step 1: 50 per cent, i.e. 50 Nm
   - Step 2: 80 per cent, i.e. 80 Nm
   - Step 3: 100 per cent, i.e. 100 Nm
4. Fit the Green Pin shackle (G-4163), WLL 13,5 tons, in the top hole in each end unit.
5. Use the sling to attach the HI SB 015 to the crane hook. When doing so, take account of the desired vertex angle, the sling length and the size of the load. See Figure 4 and Table 2 for more information.
6. Fit the Green Pin shackle (G-4163), WLL 12 tons, in the bottom hole in each end unit.
7. Get the HI SB 015 checked before use by a suitably competent member of staff or an external specialist.

Table 2 - Working load of the HI SB 015

Lifting angle top sling-vertical 60°			Recommended configuration[2]								Lifting angle top sling-vertical 90°		
Length	WLL	Sling[1]									Length	WLL	Sling[1]
1m	15t	1m	<	0,5	>						1m	15t	0,7m
1,5m	15t	1,5m	<	1	>						1,5m	15t	1,1m
2m	15t	2m	<	1	0,5	>					2m	15t	1,4m
2,5m	15t	2,5m	<	2	>						2,5m	15t	1,8m
3m	15t	3m	<	2	0,5	>					3m	15t	2,1m
3,5m	15t	3,5m	<	3	>						3,5m	15t	2,5m
4m	15t	4m	<	3	0,5	>					4m	15t	2,8m
4,5m	15t	4,5m	<	4	>						4,5m	15t	3,2m
5m	15t	5m	<	4	0,5	>					5m	15t	3,5m
5,5m	15t	5,5m	<	4	1	>					5,5m	15t	3,9m
6m	15t	6m	<	1	4	0,5	>				6m	15t	4,2m
6,5m	15t	6,5m	<	4	2	>					6,5m	15t	4,6m
7m	15t	7m	<	2	4	0,5	>				7m	15t	4,9m
7,5m	15t	7,5m	<	3	4	>					7,5m	15t	5,3m
8m	15t	8m	<	3	4	0,5	>				8m	15t	5,7m
8,5m	15t	8,5m	<	4	4	>					8,5m	15t	6m
9m	15t	9m	<	4	4	0,5	>				9m	15t	6,4m
9,5m	15t	9,5m	<	4	4	1	>				9,5m	14t	6,7m
10m	15t	10m	<	1	4	4	0,5	>			10m	12t	7,1m
10,5m	15t	10,5m	<	2	4	4	>				10,5m	11t	7,4m
11m	15t	11m	<	2	4	4	0,5	>			11m	9t	7,8m
11,5m	15t	11,5m	<	3	4	4	>				11,5m	8t	8,1m
12m	13t	12m	<	3	4	4	0,5	>			12m	7t	8,5m
12,5m	12t	12,5m	<	4	4	4	>				12,5m	6t	8,8m
13m	10t	13m	<	4	4	4	0,5	>			13m	6t	9,2m
13,5m	9t	13,5m	<	4	4	4	1	>			13,5m	5t	9,5m
14m	8t	14m	<	1	4	4	4	0,5			14m	4t	9,9m
14,5m	7t	14,5m	<	2	4	4	4	>			14,5m	3t	10,3m
15m	6t	15m	<	2	4	4	4	0,5	>		15m	2t	10,6m

Figure 3 – Pattern for tightening the bolts diagonally

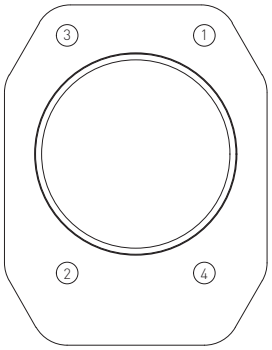
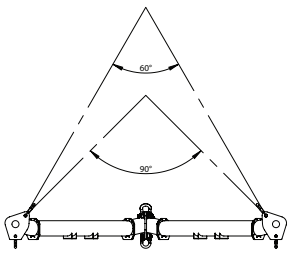
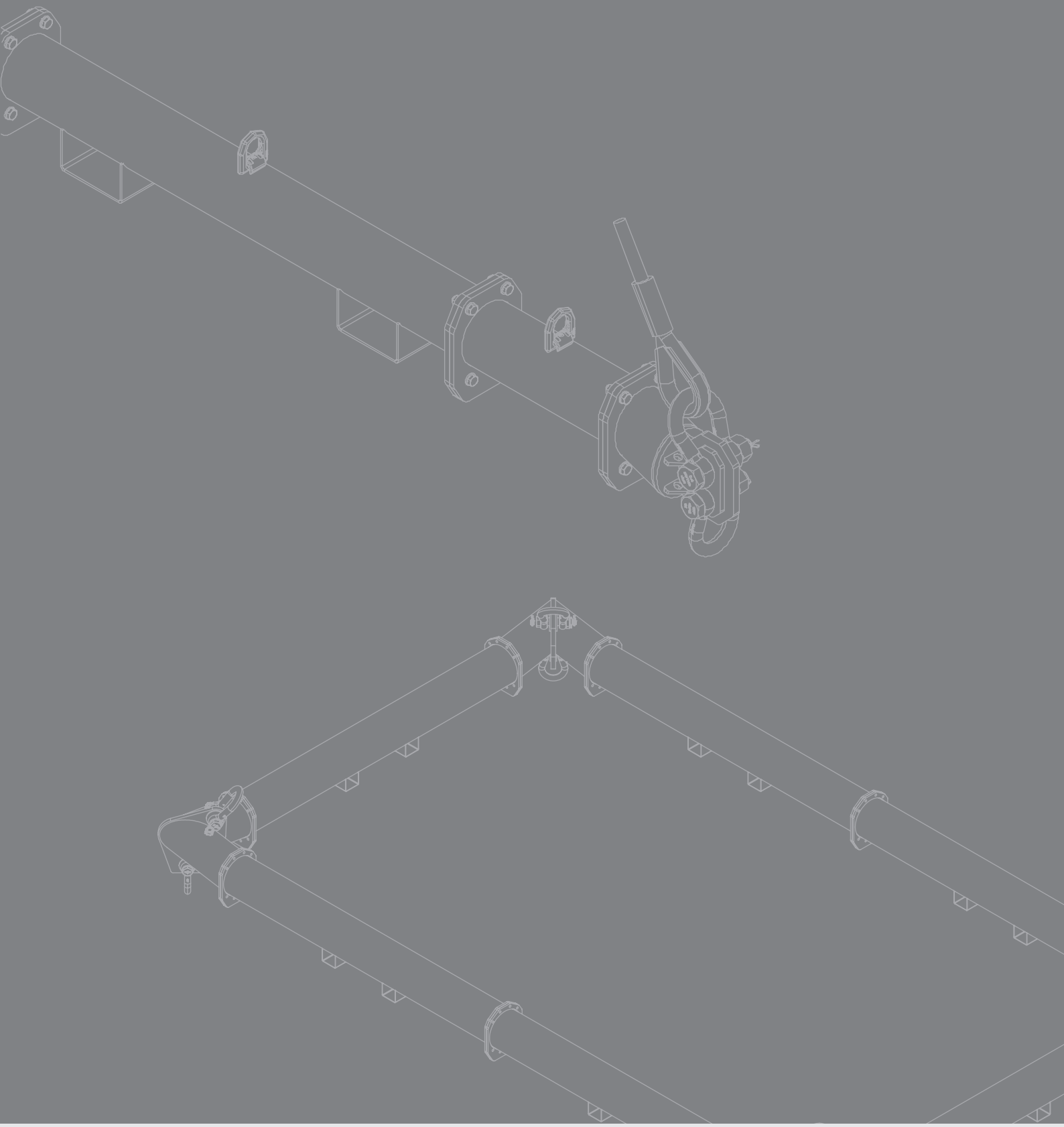


Figure 4 – Desired vertex angle for the sling



(1) Top sling - minimum sling length measured from inside eye to inside eye.
(2) Other configurations are possible. However, the configuration should consist as less struts as possible.
NB! The longest strut should always be in the middle of the spreader beam.



KSC International BV
Moezelweg 128
3198 LS Europoort Rotterdam
Tel. 0031 88 25 00 999
info@ksc-international.com
www.ksc-international.com

V02 - Augustus 2022