

ORIGINAL USER AND INSTALLATION INSTRUCTION: Lifting Eye Super Point 8-251



BA11.428-251UK02.05.22

CONFORMITY

In accordance with the Machinery Directive 2006/42EC.CERTEX Danmark A/S assures, that the equipment supplied is CE marked and delivered in accordance with Danish Standard.

If the customer makes any kind of modifications, or if the customer combines the product with a non-compliant product / component assumes CERTEX Danmark A/S is not responsible for the product.

INFORMATION

According to the Labour Inspection Authorization No. 2.3.0.4 "gripping" the staff to use lifting equipment must be instructed in the proper execution of work. The instruction must be in accordance with this authorization and shall include the specific actions required by each hooking job.

Before the equipment into service, this manual should be read through. The information is intended as a means to achieve the safe use of equipment.

User manual contains important information about how equipment is operating safely and properly.

Is the equipment used in accordance with these instructions may hazards and damage avoided.

Anyone using the equipment must read and act in accordance with instructions.

Furthermore, we refer also to WEA rules and regulations that otherwise apply on the spot. Including a.o. the message No 2:02:10.

IMPORTANT! WLL is not exceeded, and label instructions must be followed

8-251 Super Point

1. Safety Instructions

Warning Message



Wrong assembled or damaged Super Point as well as improper use can lead to injuries of persons and damage of objects when load drops. Please inspect all Super Point before each use.

When installed, the 8-251 Super Point must be rotated 360°

Refer to German standard, under rule 500 (DGUV BGR 100-500) or other country specific regulations. All the inspection should be operated by the competent persons

2. Intended use

The 8-251 Super Point must only be used for the assembly of the load or at load accepting means Their usage is intended to be used as lifting means. The 8-251 Super Point can also be used as lashing points for the fixture of lashing means.

The 8-251 Super Point must only be used in the here described usage purpose.

3. Instruction manual

3.1 General Information

The Super Point cannot be used in the following chemicals influence environment such as acid and steam. If you still cannot avoid, please contact the manufacturer to indicate how to use correctly.

Temperature effects:

As the DIN/EN bolts are used in the Super Points, the working load limit must be reduced:

-40°C to 100°C no reduction (-40°F to 212°F)

100°C to 200°C minus 15% (212°F to 392°F)

200°C to 250°C minus 20% (392°F to 482°F)

250°C to 350°C minus 25% (482°F to 662°F)

Temperature above 350°C (662°F) is not allowed.

Please note the nuts' maximum temperature (optionally): -Clamping nut according to DIN EN ISO 7042 (DIN 980) can only be used up to +150°C (302°F).

-Collar nut according to DIN 6331 can only be used up to 300°C (572°F).

Yoke Super Point is supplied with 100% crack tested bolt. Use only YOKE parts as replacements.

3.2 Assembly hints

After determining the loads on each Super Point, select the proper size Super Point using the Working Load Limit ratings in Table 1.

The material construction, to which the Super Point will be attached, should be of adequate strength to withstand forces during lifting without deformation. YOKE recommends the following minimum for bolt lengths: (M = diameter of YOKE Super Point bolt, f.eks. M20)

- 1.5 x M in Steel
- 1.5 x M in cast iron
- 2 x M in aluminum alloys
- 2.5 x M in aluminum-magnesium alloys

A plane bolting surface must be guaranteed. The holes must be drilled with a sufficient depth to guarantee compatibility with the supporting surface Load symmetry:

Using the following formula as symmetrical loading calculation:

$$W_{LL} = \frac{G}{n \times \cos \beta}$$

W_{LL} = working load limit = load weight (kg) G

= number of load bearing legs

= angle of inclination of the chain to the vertical

The calculation of load bearing is as follows:

	Symmetric	Asymmetric			
2 Legs	2	1			
3/4 Legs	3	1			

3.3 Instructions for use

The Super Point ring must not touch the edge and should be free to move.

When lifting, users should avoid sharp edges environment that will cause the damage of the lifting.

8-251 have to be mounted only with the included screw. The body is rotatable 360° and must be aligned in the permitted direction of tension before use.

Attention: SUPERPOINT is suited for turning under load in vertical direction!

To prevent unintended dismounting through shock loading, rotation or vibration thread locking fluid such as Loctite 2701 (depending on the application, need to pay attention to the manufacturer's instruction) could be used to secure the bolt, or use form-closed devices.

Attention: Ring Body must be free to rotate.

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3.4 Periodical Inspections:

Super Point should be inspected periodically, determine by the usage, but at least once a year. It should be operated by a competent person

The inspection times depend on the usage condition, which wear, or corrosion increased by frequent use. In this case, user may need to inspect more than one time a year.

4. Inspection's criteria

Before each operation, observe and control the following points during regular period

- The Super Point should be complete.
- Evidence of cracks.
- The Super Point must be free to rotate.
- The deformation of the component parts
- Confirm the compatibility of the bolt threads and tapped hole torque control
- The working load limit and manufacturer stamp should be visible clearly
- Mechanical damage, ex: notches, especially in the high-pressure area.
- Wear should not exceed 10% of the cross-sectional diameters.
- Evidence of corrosion.
- Damages on the bolts, nuts and / or thread

Table 1 YOKE 8-251 Super Point normal load applications

Kind of attachment		Ğ	A G G	G	A G	G		Ğ	3-4		
Number of legs		1 0°	2 0°	90°	90°	2		2			3-4
Angle of inclination Item nr. Thread		0° 0° 90° 0-45° 45-60° unsymm. 0-45° 45-60° unsymm WLL ton									unsymm.
8-251-004	M8	0,6	1,2	0,3	0.6	0,4	0,3	0,3	0,6	0,45	0.3
8-251-007	M10	1	2	0,5	1	0,4	0,5	0,5	1	0,45	0,5
	M12	1,4	2,8	0,3	1,4	1	0,3	0,3	1,4	1	0,3
	M14	2	4	1	2	1,4	1	1	2,12	1.5	1
8-251-014	M16	2.8	5.6	1,4	2,8	2	1,4	1,4	3	2,12	1,4
	M20	3,4	6,8	1,7	3,4	2,4	1,7	1,7	3,55	2,5	1,7
	M24	3,4	6,8	1,7	3,4	2,4	1,7	1,7	3,55	2,5	1,7
8-251-025	M20	5	10	2,5	5	3,55	2,5	2,5	5,3	3,75	2,5
8-251-040	M24	8	16	4	8	5,6	4	4	8,5	6	4
	M30	8	16	4	8	5,6	4	4	8,5	6	4
8-251-067	M30	12	24	6,7	13,4	9,5	6,7	6,7	14	10	6,7
8-251-080	M30	12	24	8	16	11.2	8	8	16	12	8
8-251-100	M36	15	30	10	20	14	10	10	21,2	15	10
8-251-125	M42	15	30	12,5	25	17	12,5	12,5	25	18	12,5
	M45	15	30	12,5	25	17	12,5	12,5	25	18	12,5
	M48	15	30	12,5	25	17	12,5	12,5	25	18	12,5
8-251-170	M42	20	40	13	26	18	13	13	27	19	13
	M45	25	50	17	34	23,5	17	17	35	25	17
	M48	25	50	17	34	23,5	17	17	35	25	17
	M56	25	50	18	36	25	18	18	37,5	26,5	18
8-251-200	M64	25	50	20	40	28	20	20	42,5	30	20
8-251-280	M64	32,5	65	28	56	39	28	28	58	42	28
	M72	32,5	65	28	56	39	28	28	58	42	28
	M80	32,5	65	28	56	39	28	28	58	42	28
8-251-350	M80	40	80	35	70	49	35	35	74	52,5	35
	M90	40	80	35	70	49	35	35	74	52,5	35
8-251-400	M80	50	100	40	80	56	40	40	84	60	40
	M90	50	100	40	80	56	40	40	84	60	40
	M100	50	100	40	80	56	40	40	84	60	40