ORIGINAL USER AND INSTALLATION INSTRUCTION:
Anchor Point 8-231

CERTEX

CONFORMITY

BA11.428-231UK05.10.21

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.

Anchor Point type 8-231
WARNINGS AND ORIGINAL INSTRUCTIONS

WARNING

- Loads may slip or fall if proper anchor point assembly and lifting procedures are not used.
- A falling load may cause serious injury or death.
- Install anchor point bolt to torque requirements listed in tables 2 for the 8-231,8-232 respectively.
- Read, understand and follow all instructions and chart information.
- Do not use with damaged slings, chain, or webbing. For inspection criteria see ASME B30.9.
- Use only YOKE parts as replacements.

Anchor point application assembly safety

After determining the loads on each anchor point, select the proper size anchor point using the WLL ratings in Table 1.
Drill and tap the work piece to the correct size to a minimum depth of one-half the threaded shank diameter plus the threaded shank length. See rated load limit and bolt torque requirements imprinted on top of the swivel trunnion (see Table 2).
Install anchor point to recommended torque with a torque wrench making sure the bushing flange meets the load (work piece) surface.
Never use spacers between bushing flange and mounting surface.
Always select proper load rated lifting device for use with anchor point.
Attach lifting device ensuring free fit to anchor point bail (lifting ring) (Fig. 1).
Apply partial load and check proper rotation and alignment. There should be no interference between load (work piece) and anchor point bail (Fig. 2).

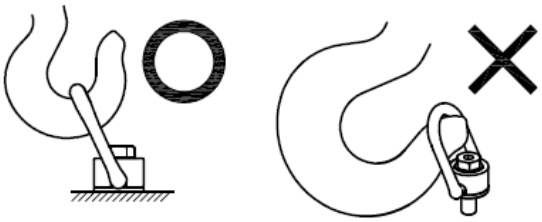


Figure 1

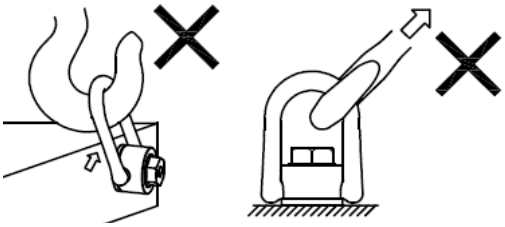


Figure 2

Anchor point inspection / Maintenance

Always inspect anchor point before use.
Regularly inspect anchor point parts (Fig.3).

External inspection points

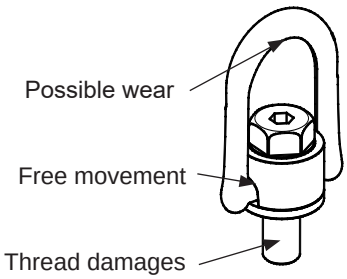


Figure 3

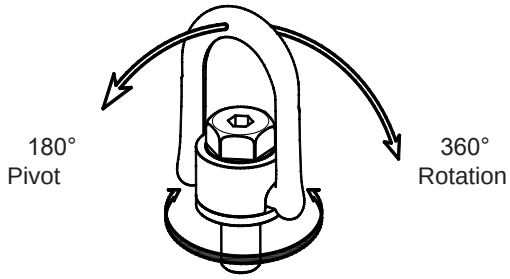
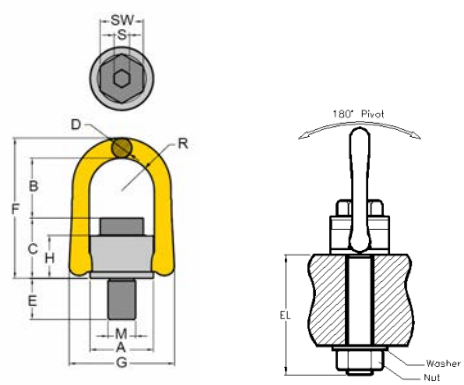


Figure 4

Never use anchor point that shows signs of corrosion, wear or damage.
Never use anchor point if bail is bent or elongated.



Always be sure threads on shank and receiving hole are clean, not damaged, and fit properly.
Always check with torque wrench before using an already installed anchor point.
Always make sure there are no spacers (washers) used between bushing flange and the mounting surface. Remove any spacers (washers) before use.
Always ensure free movement of bail. The bail should pivot 180 degrees and swivel 360° (Fig. 4)
Always be sure total work piece surface is in contact with anchor point bushing mating surface. Drilled and tapped hole must be 90° to load (work piece) surface.

Opereation safety

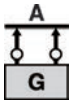
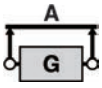
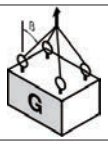
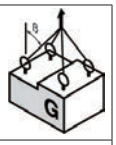
Never exceed the capacity of the anchor point, see Table 1.
When using lifting slings of two or more legs, make sure the forces in the legs are calculated using the angle from the horizontal sling angle to the leg and select the proper size anchor point to allow for the angular forces, see Table 1.

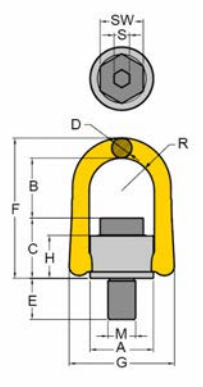
Effects of temperature:

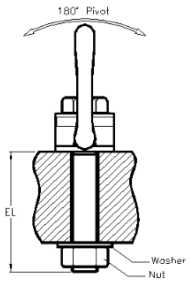
Due to the DIN/EN bolts that are used with the anchor point, the working load limit must be reduced accordingly:

-40° to 200°C	Minus 0%	-40°F til 392°F
200° to 300°C	Minus 10%	392°F til 572°F
300° to 400°C	Minus 25%	572°F til 752°F
Temperature above 400°C(752°F) are not permitted.		

Tabel 1

											
Number of leg		**1**	**2**	**1**	**2**	**2**		**2**	**3-4**		**3-4**
Angle of inclination		**0°**	**0°**	**90°**	**90°**	**0-45°**	**45-60°**	**unsymm.**	**0-45°**	**45-60°**	**unsymm.**
Item no.	**Thread**	**WLL ton**									
8-231-005	M8x1.25	0,5	1,0	0,5	1,0	0,7	0,5	0,5	1,1	0,8	0,5
8-231-007	M10x1.5	0,7	1,4	0,7	1,4	1,0	0,7	0,7	1,5	1,1	0,7
8-231-010	M12x1,75	1,0	2,0	1,0	2,0	1,4	1,0	1,0	2,1	1,5	1,0
8-231-015	M14x2.0	1,5	3,0	1,5	3,0	2,1	1,5	1,5	3,2	2,3	1,5
8-231-020	M16x2.0	2,0	4,0	2,0	4,0	2,8	2,0	2,0	4,2	3,0	2,0
8-231-030	M20x2.5	3,0	6,0	3,0	6,0	4,2	3,0	3,0	6,3	4,5	3,0
8-231-025	M18x2.0	2,5	5,0	2,5	5,0	3,5	2,5	2,5	5,3	3,8	2,5
8-231-050	M24x3.0	5,0	10,0	5,0	10,0	7,0	5,0	5,0	10,5	7,5	5,0
8-231-056	M27x3.0	5,6	11,2	5,6	11,2	7,8	5,6	5,6	11,8	8,4	5,6
8-231-078	M30x3.5	7,8	15,6	7,8	15,6	10,9	7,8	7,8	16,4	11,7	7,8
8-231-125	M36x4.0	12,5	25,0	12,5	25,0	17,5	12,5	12,5	26,3	18,8	12,5
8-231-156	M42x4.5	15,6	31,2	15,6	31,2	21,8	15,6	15,6	32,8	23,4	15,6
8-231-200	M48x5.0	20,0	40,0	20	40,0	28,0	20,0	20,0	42,0	30,0	20,0
8-231-220	M56x5.5	22,0	44,0	22	44,0	30,8	22,0	22,0	46,2	33,0	22,0
8-231-225	M64x6.0	22,5	45,0	22,5	45,0	31,5	22,5	22,5	47,3	33,8	22,5





Tabel 2

Item nr.	WLL ton*	Torque Nm	Thread	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	EL mm	R mm	S mm	SW mm	Weight kg
8-231-005	0,5	30	M8x1.25	32	42	28	11	12	80	58	23	83	17	6	13	0,3
8-231-007	0,7	60	M10x1.5	32	41	29	11	15	80	58	23	103	17	6	17	0,3
8-231-010	1,0	100	M12x1,75	32	40	31	11	20	80	58	23	128	17	8	19	0,3
8-231-015	1,5	120	M14x2.0	50	56	45	17	21	117	86	36	-	27	10	22	0,9
8-231-020	2,0	150	M16x2.0	50	54	46	17	24	117	86	36	149	27	10	24	0,9
8-231-030	3,0	250	M20x2.5	50	52	49	17	30	117	86	36	194	27	12	30	1,0
8-231-025	2,5	200	M18x2.0	65	78	57	20	26	153	108	44	-	34	12	30	1,9
8-231-050	5,0	400	M24x3.0	65	75	59	20	36	153	108	44	221	34	14	36	2,0
8-231-056	5,6	400	M27x3.0	87	96	79	30	38	205	148	62	-	46	17	41	4,9
8-231-078	7,8	500	M30x3.5	87	94	81	30	48	205	148	62	278	46	17	46	5,0
8-231-125	12,5	1000	M36x4.0	87	90	85	30	54	205	148	62	238	46	22	55	5,5
8-231-156	15,6	1500	M42x4.5	109	109	101	36	63	244	183	75	276	57	24	65	10,2
8-231-200	20,0	2000	M48x5.0	109	105	105	36	72	244	183	75	311	57	27	75	10,9
8-231-220	22,0	2100	M56x5.5	123	122	113	38	84	273	202	77	-	64	-	85	14,2
8-231-225	22,5	2200	M64x6.0	123	118	118	38	100	273	202	77	-	64	-	95	15,8
*Design factor 4:1																