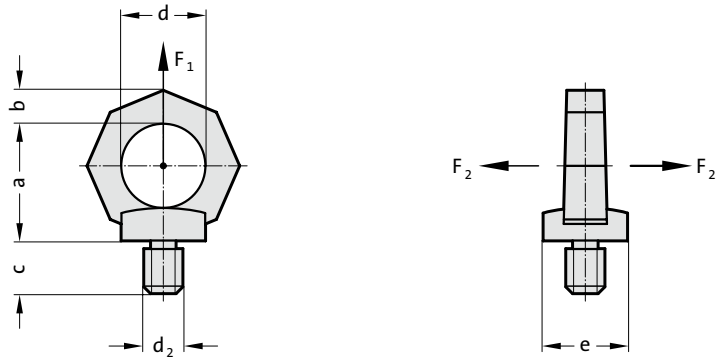


LIFTING EYE BOLT, HIGH TENSILE



2131.10.



Description:

During use check that the eyebolt is firmly seated.
 Rotation during the lifting operation must be avoided.
 It will not rotate automatically to the correct load angle.
 Not approved for mining applications.

Material:

1.6541, heavy duty heat treated.
 100% electromagnetically crack tested, to EN 1677-1, safety factor 4:1.

Note:

Ensure that the bolting surface is flat. Thread must be screwed in completely.
 Form: = octagonal, Grade 8
 Identification: clear indication of permissible load for F₂ category critical loads (not permissible for DIN 580)

2131.10. Lifting eye bolt, high tensile

Order No	d ₂	c	a	b	d	e
2131.10.006	M6	12	34	11	25	25
2131.10.008	M8	12	34	11	25	25
2131.10.010	M10	15	34	11	25	25
2131.10.012	M12	18	41	13	30	30
2131.10.014	M14	21	48	15	35	35
2131.10.016	M16	24	48	15	35	35
2131.10.020	M20	30	55	17	40	40
2131.10.024	M24	36	70	21	50	50
2131.10.030	M30	45	85	26	60	60
2131.10.036	M36	54	130	43	90	100
2131.10.042	M42	63	130	43	90	100
2131.10.048	M48	67	130	43	90	100

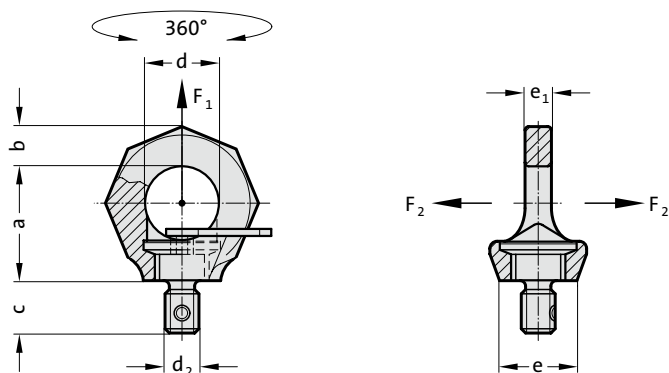
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points								
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Order No.	carried load in tonnes							
2131.10.006	0,4		0,8					
2131.10.008	0,8		1,6					
2131.10.010	1		2					
2131.10.012	1,6		3,2					
2131.10.014	3		6					
2131.10.016	4		8					
2131.10.020	6		12					
2131.10.024	8		16					
2131.10.030	12		24					
2131.10.036	16		32					
2131.10.042	24		48					
2131.10.048	32		64					

We recommend that you use the eyebolt 2131.11. that is adjustable in the direction of force for the type of suspension with no details of carried loads!

LIFTING EYE BOLT, ROTATABLE

2131.11.



Description:

During use check that the hexagon socket screw is firmly seated. Can be set for the direction of application so that there is no accidental turning and flipping over. Captive hexagon socket screw. No tools are required as the hexagon socket screw is supplied with a hardened star profile key. The star profile key engages in the hexagon socket. It can be screwed and unscrewed by hand.

Make sure that the ring is free to rotate through 360° when the unit is screwed in.

Material:

1.6541, forged, heavy duty heat treated.

100% electromagnetically crack tested, to EN 1677-4, safety factor 4:1.

Note:

Ensure that the bolting surface is flat. Thread must be screwed in completely.

Form: octagonal – clearly distinguishable to DIN 580 eye bolt

Identification: clear indication of permissible load

2131.11. Lifting eye bolt, rotatable

Order No	d ₂	c	a	b	d	e	e ₁
2131.11.006	M6	9	28	9	20	23	7
2131.11.008	M8	12	35	11	25	25	9
2131.11.010	M10	15	35	11	25	25	9
2131.11.012	M12	18	42	13	30	30	10
2131.11.016	M16	24	49	15	35	36	13
2131.11.020	M20	30	58	17	40	41	16
2131.11.024	M24	36	70	20	49	51	19
2131.11.030	M30	45	87	26	60	66	24
2131.11.036	M36	54	103	32	72	76	29
2131.11.042	M42	63	121	37	84	86	33
2131.11.048	M48	72	138	42	94	100	42

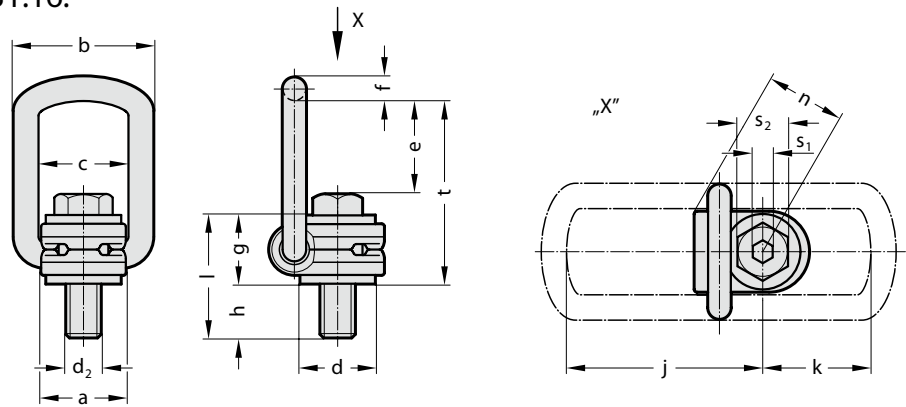
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points								
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°
Order No.	carried load in tonnes							
2131.11.006	0,5	0,1	1	0,2	0,14	0,1	0,1	0,1
2131.11.008	1	0,3	2	0,6	0,42	0,3	0,3	0,3
2131.11.010	1	0,4	2	0,8	0,56	0,4	0,4	0,4
2131.11.012	2	0,75	4	1,5	1	0,75	0,75	0,75
2131.11.016	4	1,5	8	3	2,1	1,5	1,5	1,5
2131.11.020	6	2,3	12	4,6	3,22	2,3	2,3	2,3
2131.11.024	8	3,2	16	6,4	4,48	3,2	3,2	3,2
2131.11.030	12	4,5	24	9	6,3	4,5	4,5	4,5
2131.11.036	16	7	32	14	9,8	7	7	7
2131.11.042	24	9	48	18	12,6	9	9	9
2131.11.048	32	12	64	24	16,8	12	12	12

HOISTING SNAP LINK



2131.16.



Description:

The hinged unit is free to rotate through 360°, self-align with the direction of pull and folding. The hoisting Snap Link must be installed in the stress direction before loading, must be able to move freely and may not be supported at an angle.

Do not rotate under load.

Full load bearing capacity in any direction.

Complete with a 100% crack-checked outer and inner hexagonal bolt for universal tool use.

Note:

Ensure even screw-in surface, threads must be screwed in completely.

2131.16. Hoisting snap link

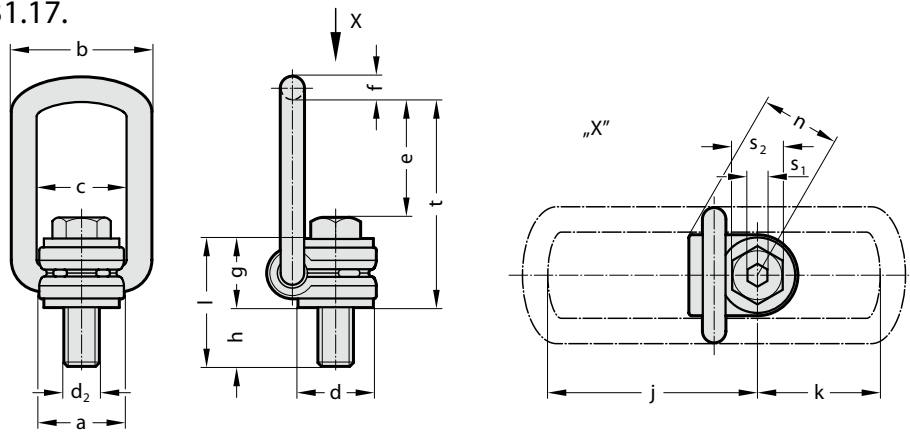
Order No	a	b	c	d	e	f	g	h	j	k	l	d ₂	n	s ₁	s ₂	t	Tightening torque [Nm]
								Standard			Standard						
2131.16.008.011	30	52	34	24	40	10	29	11	75.3	45	40	M8	32	5	13	75	30
2131.16.010.015	30	52	34	24	39	10	29	15	75.3	45	44	M10	32	6	17	75	60
2131.16.012.018	32	52	34	26	38	10	29	18	77.3	45	47	M12	32	8	19	75	150
2131.16.016.022	34.5	56	38	30	39	13.5	36	22	86.3	47	58	M16	38	10	24	85	150
2131.16.020.032	50	82	54	45	55	17	43	32	113.8	64	75	M20	48	12	30	110	400
2131.16.024.037	50	82	54	45	67	17	43	37	129.8	78	80	M24	48	14	36	125	760
2131.16.030.049	60	103	65	60	67	22.5	61	49	151.3	80	110	M30	67	17	46	147	1000
2131.16.036.063	77	122	82	70	97	26.5	77	63	203.3	113	140	M36	79	22	55	196	800
2131.16.042.073	77	122	82	70	94	26.5	77	73	204.3	113	150	M42	79	24	65	196	1000
2131.16.042.063	95	156	100	85	109	36	87	63	228	130	150	M42	100	24	65	22	1500
2131.16.048.073	95	156	100	95	105	36	87	73	231	130	160	M48	100	27	75	222	2000

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points								
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Order No.	carried load in tonnes							
2131.16.008.011	0,63	0,63	1,26	1,26	0,88	0,63	0,63	0,63
2131.16.010.015	0,9	0,9	1,8	1,8	1,26	0,9	0,9	0,9
2131.16.012.018	1,35	1,35	2,7	2,7	1,9	1,35	1,35	1,35
2131.16.016.022	2	2	4	4	2,8	2	2	2
2131.16.020.032	3,5	3,5	7	7	4,9	3,5	3,5	3,5
2131.16.024.037	4,5	4,5	9	9	6,3	4,5	4,5	4,5
2131.16.030.049	6,7	6,7	13,4	13,4	9,4	6,7	6,7	6,7
2131.16.036.063	8	8	16	16	11,2	8	8	8
2131.16.042.073	10	10	20	20	14	10	10	10
2131.16.042.063	15	15	30	30	21	15	15	15
2131.16.048.073	20	20	40	40	28	20	20	20

HOISTING SNAP LINK, WITH BALL BEARING

2131.17.



Description:

The hinged unit is free to rotate through 360°, self-align with the direction of pull and folding. The hoisting Snap Link must be installed in the stress direction before loading, must be able to move freely and may not be supported at an angle.

Rotatable under load.

Full load bearing capacity in any direction.

Complete with a 100% crack-checked outer and inner hexagonal bolt for universal tool use.

Note:

Ensure even screw-in surface, threads must be screwed in completely.

2131.17. Hoisting snap link, with ball bearing

Order No	a	b	c	d	e	f	g	h	j	k	l	d ₂	n	s ₁	s ₂	t	Tightening torque [Nm]
2131.17.008	30	52	34	24	40	10	29	Standard	75	43	40	M8	32	5	13	75	30
2131.17.010	30	52	34	24	39	10	29	15	75	43	44	M10	32	6	17	75	60
2131.17.012	32	52	34	26	38	10	29	18	75	43	47	M12	32	8	19	75	150
2131.17.016	34.5	56	40	30	39	13.5	36	22	86	46	58	M16	38	10	24	85	150
2131.17.020	54	82	60	45	53	17	43	32	113	61	75	M20	48	12	30	110	400
2131.17.024	54	82	60	45	66	17	43	37	130	76	80	M24	48	14	36	125	760
2131.17.030	63	103	69	55	66	22.5	61	49	151	79	110	M30	66	17	46	147	1000

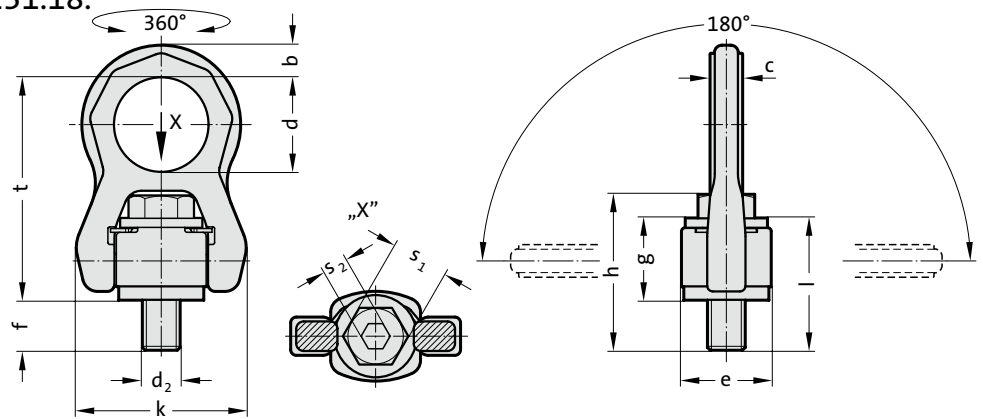
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points								
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 v 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Order No.	carried load in tonnes							
2131.17.008	0,6	0,6	1,2	1,2	0,8	0,6	1,2	0,6
2131.17.010	0,9	0,9	1,8	1,8	1,2	0,9	1,9	1,3
2131.17.012	1,35	1,35	2,7	2,7	1,9	1,35	2,8	2
2131.17.016	2,5	2,5	5	5	3,5	2,5	5,3	3,7
2131.17.020	3,5	3,5	7	7	4,9	3,5	7,4	5,2
2131.17.024	4,5	4,5	9	9	6,3	4,5	9,5	6,7
2131.17.030	6,7	6,7	13,4	13,4	9,4	6,7	14,2	10

ACP-TORNADO



2131.18.



Description:

The ACP-Tornado can be swivelled by 360°, adjusted in the traction direction and pivoted by 180°. The clevis must be freely movable and must not be supported on the edges.

The spring mechanics ensure that the clevis is automatically aligned in the direction of the optimum force initiation.

Can be rotated under load.

Full load-carrying capacity in all load directions.

Can be loaded on all sides with four-fold safety (4:1).

Complete with a 100% crack-tested exterior and interior hexagon bolt for universal die application.

Note:

Ensure even screw-in surface, threads must be screwed in completely.

2131.18. ACP-Tornado

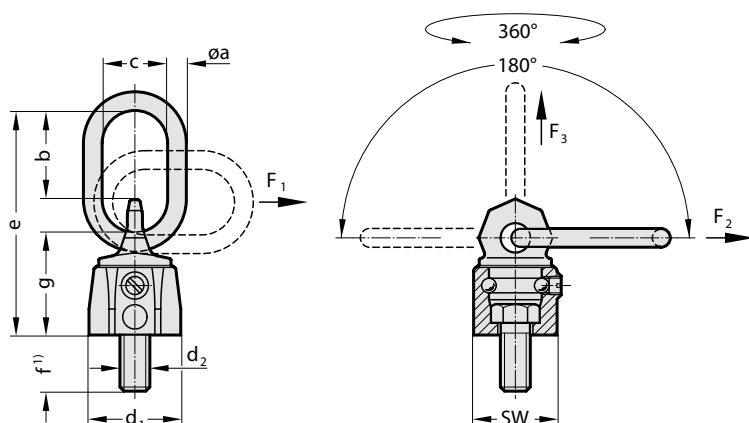
Order No	b	c	d	e	f	g	h	k	l	d ₂	s ₁	s ₂	t	Tightening torque [Nm]
2131.18.012	11	10.5	38	30	19	28	54.5	58	47	12	19	8	83	80
2131.18.016	14	14	50	40	22	36	68	76	58	16	24	10	107	150
2131.18.020	17	17.25	50	45	26.5	43.5	82.5	89	70	20	30	12	118	300
2131.18.024	23	23	66	60	34	55	104	120.5	89	24	36	14	154	500
2131.18.030	29	27	75	75	41.5	68.5	128.7	148	110	30	46	17	183	800

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points									
Number of lines	1	1	2	2	2 symmetrical	2	3 and 4 symmetrical	3 and 4 asymmetrical	3 nd asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	
Order No.	carried load in tonnes								
2131.18 .012	1,35	1,35	2,7	2,7	1,9	1,35	1,35	2,84	1,35
2131.18 .016	2,5	2,5	5	5	3,5	2,5	2,5	5,25	2,5
2131.18 .020	4	4	8	8	5,6	4	4	8,4	4
2131.18 .024	6,3	6,3	12,6	12,6	8,8	6,3	6,3	13,2	6,3
2131.18 .030	8	8	16	16	11,2	8	8	17	8

ROTARY SAFETY EYEBOLT, LIGHT DUTY, WITH BALL BEARING

2131.20.



Description:

For loads that are turned and rotated.
 Mounted on ball-bearings – can be rotated through 360° under load (F_3).
 Cannot be rotated under full load at 90° to the threaded fixing (F_1, F_2).
 Not suitable for extended rotational movement when fully loaded.
 Can be loaded on all sides with a safety factor 4:1.
 High-strength suspension eye conforming to EN 1677-4

¹) Other thread lengths available upon request.

Note:

Ensure that the bolting surface is flat. Thread must be screwed in completely.
 The threaded connection on the transported load must be suitable for transferring forces.

2131.20. Rotary safety eyebolt, light duty, with ball bearing

Order No	Rated carrying capacity									
	for F_1 [t]	a	b	c	d_1	d_2	e	f	g	SW
2131.20.008.013	0.3	8	31	29	30	8	76	13	36	28
2131.20.010.017	0.45	8	31	29	33.5	10	78	17	38	30

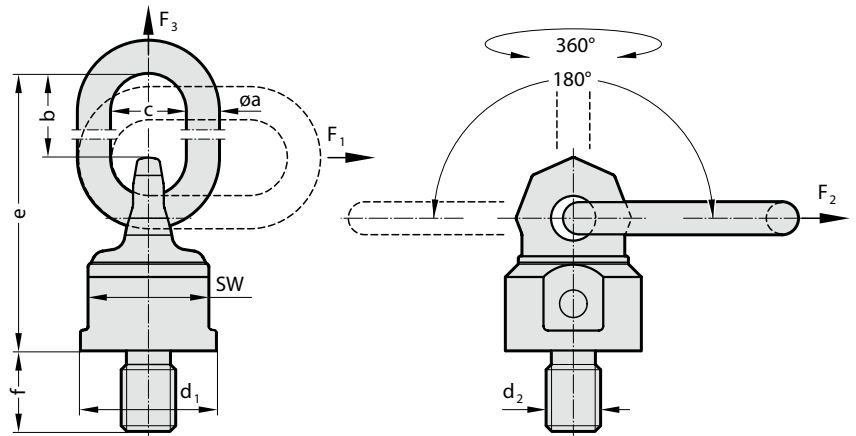
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points	$F_3 \uparrow$ G	$F_1(F_2) \uparrow$ G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 and 4 asymmetrical			
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°			
Order No.	Thread										
	carried load in tonnes										
2131.20.008.013	M 8	0,6	0,3 (0,4)	1,2	0,6 (0,8)	0,42 (0,56)	0,3 (0,4)	0,3 (0,4)	0,63 (0,84)	0,45 (0,6)	0,3 (0,4)
2131.20.010.017	M10	0,9	0,45 (0,6)	1,8	0,9 (1,2)	0,63 (0,84)	0,45 (0,6)	0,45 (0,6)	0,94 (1,26)	0,67 (0,9)	0,45 (0,6)

ROTARY SAFETY EYEBOLT, HEAVY DUTY, WITH BALL BEARING



2131.21.



Description:

For loads that are turned and rotated.
 Mounted on ball-bearings – can be rotated through 360° under load (F_3).
 Cannot be rotated under full load at 90° to the threaded fixing (F_1, F_2).
 Not suitable for extended rotational movement when fully loaded.
 Can be loaded on all sides with a safety factor 4:1.

Note:

Ensure that the bolting surface is flat. Thread must be screwed in completely.
 The threaded connection on the transported load must be suitable for transferring forces.

2131.21. Rotary safety eyebolt, heavy duty, with ball bearing

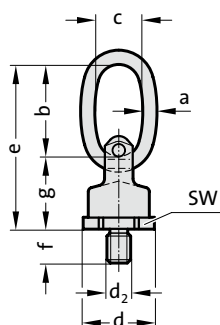
Order No	Rated carrying capacity for F_1 [t]	d_2	f	a	b	c	d_1	e	SW
2131.21.036	8	M36	54	22	86	50	90	208	80
2131.21.042	12	M42	63	26	111	65	98	235	85
2131.21.045	12	M45	67	26	111	65	98	235	85
2131.21.048	13	M48	68	26	111	65	98	235	85
2131.21.056	16	M56	84	32	119	70	120	274	95
2131.21.064	16	M64	94	32	119	70	120	274	95
2131.21.090	40	M90	135	46	170	110	170	378	145

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points	$F_3 \uparrow$ G	$F_1(F_2) \uparrow$ G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G	\uparrow G		
Number of lines	1	1	2	2	2 symmetrical	2	3 and 4 symmetrical	3 and 4 asymmetrical	3 and 4 asymmetrical		
Angle of inclination/load direction	0°	90°	0°	90°	0–45°	45–60°	asymmetrical	0–45°	45–60°		
Order No.	Thread	carried load in tonnes									
2131.21.036	M36	15	8 (10)	30	16 (20)	11,2 (14)	8 (10)	8 (10)	16,8 (21)	12 (15)	8 (10)
2131.21.042	M42	17	12 (13)	34	24 (26)	16,8 (18,2)	12 (13)	12 (13)	25,2 (27,3)	18 (19,5)	12 (13)
2131.21.045	[M45]	18	12 (15)	36	24 (30)	16,8 (21)	12 (15)	12 (15)	25,2 (31,5)	18 (22,5)	12 (15)
2131.21.048	M48	18	13 (16)	36	26 (32)	18,2 (22,4)	13 (16)	13 (16)	27,3 (33,6)	19,5 (24)	13 (16)
2131.21.056	M56	28	16 (22)	56	32 (44)	22,4 (30,8)	16 (22)	16 (22)	33,6 (46,2)	24 (33)	16 (22)
2131.21.064	M64	28	16 (25)	56	32 (50)	22,4 (35)	16 (25)	16 (25)	33,6 (52,5)	24 (37,5)	16 (25)
2131.21.090	M90	50	40 (50)	100	80 (100)	56 (70)	40 (50)	40 (50)	84 (105)	60 (75)	40 (50)

UNIVERSAL ROTARY SAFETY EYEBOLT WITH OVAL RING

2131.25.



Description:

The universal rotary safety eyebolts with oval ring with double ball bearing for smooth non-jerking action tipping, rotating and turning. Also rotates 90° in direction of screwing in with full load. Not suitable for extended rotational movement when fully loaded. The special design avoids damage to lifting elements and the valuable load when turning. For ring hoists, slings, cables, hooks etc.

Note:

Ensure even screw-in surface, threads must be screwed in completely.

2131.25. Universal rotary safety eyebolt with oval ring

Order No	Rated carrying capacity [t]	d ₂	f	a	b	c	d	e	g	SW
2131.25.012	0,63	M12	18	9	65	35	40	105	41	36
2131.25.016	1,5	M16	24	11	65	35	46	115	50	41
2131.25.020	2,5	M20	30	13	75	40	61	135	61	55
2131.25.024	4	M24	36	16	95	45	78	172	77	70
2131.25.030	5	M30	45	21	130	60	95	223	93	85
2131.25.036	8	M36	54	24	140	65	100	242	102	90

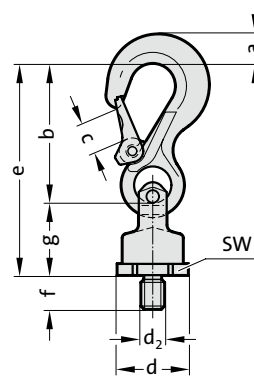
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points								
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Order No.	carried load in tonnes							
2131.25.012	0,63	0,63	1,26	1,26	0,88	0,63	1,32	0,95
2131.25.016	1,5	1,5	3,0	3,0	2,1	1,5	3,15	2,25
2131.25.020	2,5	2,5	5,0	5,0	3,5	2,5	5,25	3,75
2131.25.024	4,0	4,0	8,0	8,0	5,6	4,0	8,4	6,0
2131.25.030	6,7	5,0	13,4	10,0	7	5	10,5	7,5
2131.25.036	10,0	8,0	20,0	16,0	11,2	8,0	16,8	12,0

UNIVERSAL ROTARY SAFETY EYEBOLT WITH EYE HOOK



2131.23.



Description:

The universal rotary safety eyebolts with eye hooks with double ball bearing for smooth non-jerking action tipping, rotating and turning. Also rotates 90° in direction of screwing in with full load. Not suitable for extended rotational movement when fully loaded. The special design avoids damage to lifting elements and the valuable load when turning. For ring hoists, slings, cables, hooks etc.

Note:

Ensure even screw-in surface, threads must be screwed in completely.

2131.23. Universal rotary safety eyebolt with eye hook

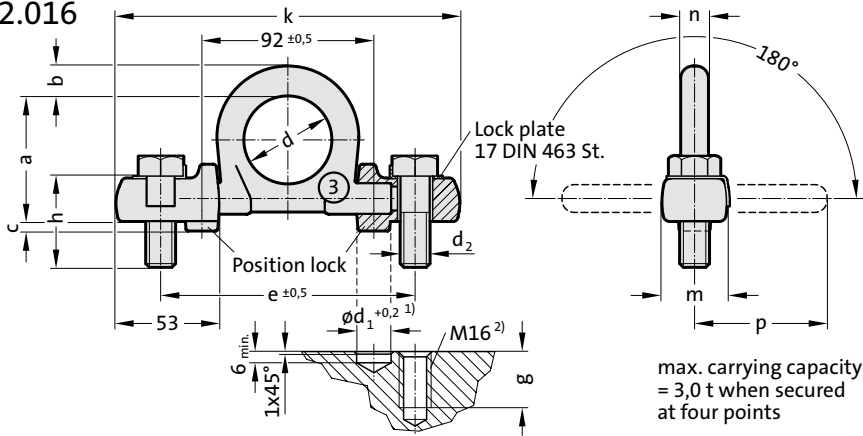
Order No	Rated carrying capacity [t]	d ₂	f	a	b	c	d	e	g	SW
2131.23.012	0,63	M12	18	13	75	18	40	116	41	36
2131.23.016	1,5	M16	24	20	97	25	46	147	50	41
2131.23.020	2,5	M20	30	28	126	30	61	187	61	55
2131.23.024	4	M24	36	36	150	35	78	227	77	70
2131.23.030	5	M30	45	37	174	40	95	267	93	85
2131.23.036	8	M36	54	49	208	48	100	310	102	90

Max. carried load "G" in tonnes for various types of attachment

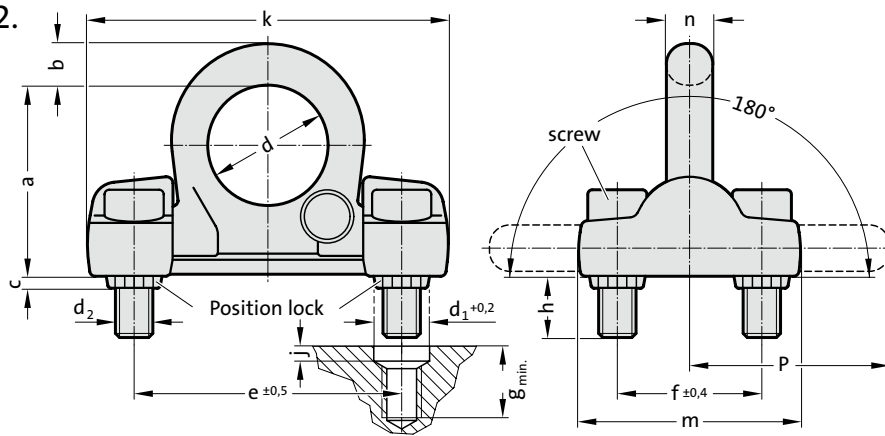
Type of attachment/Arrangement of the suspension points								
Number of lines	1	1	2	2	2 symmetrical	2 asymmetrical	3 and 4 symmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Order No.	carried load in tonnes							
2131.23.012	0,63	0,63	1,26	1,26	0,88	0,63	1,32	0,95
2131.23.016	1,5	1,5	3,0	3,0	2,1	1,5	3,15	2,25
2131.23.020	2,5	2,5	5,0	5,0	3,5	2,5	5,25	3,75
2131.23.024	4,0	4,0	8,0	8,0	5,6	4,0	8,4	6,0
2131.23.030	6,7	5,0	13,4	10,0	7	5,0	10,5	7,5
2131.23.036	10,0	8,0	20,0	16,0	11,2	8,0	16,8	12,0

RING BLOCK WITH POSITION LOCK

2131.22.016



2131.22.



Description:

The position locks protect the fixing bolts against bending and shear stresses. The ring can be folded down.

Note:

- ¹⁾ Drill the holes for the position locks first.
 - ²⁾ Fix the ring block in the position lock and then tap the holes.
- Ensure that the bolting surface is flat.
See also loading of eyebolts.
The threaded connection on the transported load must be suitable for transferring forces.

Fixing:

Only use 100% crack tested bolts.
Once bolts have been in use for some time, check that they are firmly seated.

Minimum grade of screws, see table: "Y"

2131.22.016.: Only use hexagonal bolts to ISO 4014. Fit washers before tightening and securing bolts (tightening torque 120 Nm).

2131.22.020./030.: Use only hexagon socket head screws conforming to ISO 4762 (2131.22.020 tightening torque 300 Nm, 2131.22.030 tightening torque 600 Nm).

2131.22. Ring block with position lock

Order No	Rated carrying capacity [t]	d_2	h	a	b	c	d	d_1	e	f	g	j	k	m	n	y	p
2131.22.016	3	M16	50	67	16	5	48	18	136	-	30		178	34	16	10.9	71
2131.22.020	10	M20	45	102	22	6	65	30	143	78	50	8	213	120	25	12.9	100
2131.22.030	16	M30	63	131	30	8	90	46	198	104	70	10	270	170	32	12.9	134

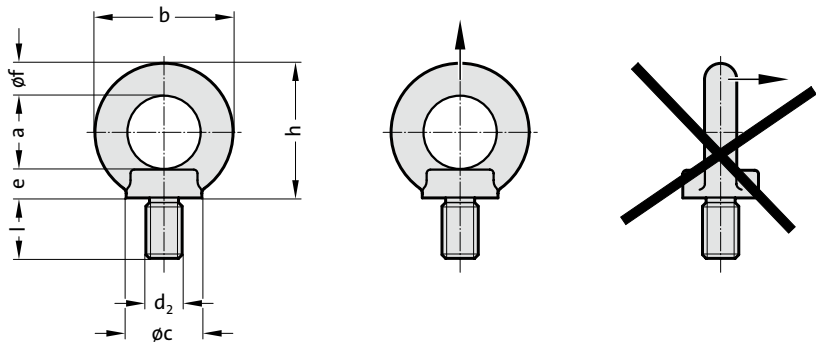
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points	$F_3 \uparrow$ G	$F_1(F_2) \uparrow$ G	$F_1 \uparrow$ G	$F_2 \uparrow$ G	$F_1 \uparrow$ G	$F_2 \uparrow$ G	$F_1 \uparrow$ G	$F_2 \uparrow$ G								
Number of lines	1	1	2	2	2 symmetrical	2	3 and 4 symmetrical	3 and 4								
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	asym-metrical	0-45°	45-60°	asym-metrical						
Order No.	Thread								carried load in tonnes							
2131.22.016	2 × M16	3	3	6	6	4,2	3	3	6,3	4,5	3					
2131.22.020	4 × M20	10	10	20	20	14	10	10	21	15	10					
2131.22.030	4 × M30	16	16	32	32	22,4	16	16	33,6	24	16					

LIFTING EYE BOLT, HIGH TENSILE



2131.30.



Description:

Only tighten eyebolts hand-tight. Not suitable for diagonal pull. Avoid turning movements during transport.

Material:

Alloyed steel, hardened and tempered, quality class 8

Note:

Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
 - direction of pull does not lie in the specified range
- Safety factory 4

2131.30. Lifting eye bolt, high tensile

Order No	Rated carrying capacity [t]	d ₂	l	a	b	c	e	f	h
2131.30.006	0.4	M6	13	25	45	25	10	10	45
2131.30.008	0.8	M8	13	25	45	25	10	10	45
2131.30.010	1	M10	17	25	45	25	10	10	45
2131.30.012	1.6	M12	21	35	63	35	14	14	62
2131.30.014	3	M14	21	35	63	35	14	14	62
2131.30.016	4	M16	27	35	63	35	14	14	62
2131.30.020	6	M20	30	50	90	50	20	20	90
2131.30.024	8	M24	36	50	90	50	20	20	90
2131.30.030	12	M30	45	60	108	65	24	24	109
2131.30.036	16	M36	54	70	126	75	26	28	128
2131.30.042	24	M42	63	80	144	85	30	32	147
2131.30.048	32	M48	68	90	166	100	35	38	168

Max. carried load "G" in tonnes for various types of attachment

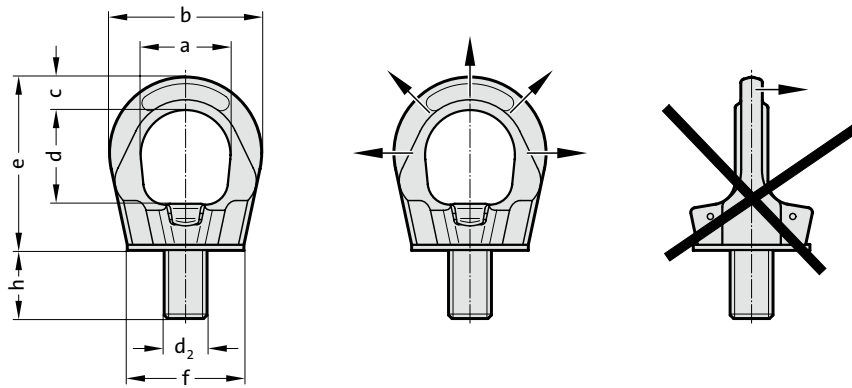
Type of attachment/Arrangement of the suspension points

Type of attachment/Arrangement of the suspension points	1	1	2	2	2	2	3+4	3+4	2	3+4
Number of lines	1	1	2	2	2	2	3+4	3+4	2	3+4
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical	asymmetrical
Order No.	carried load in tonnes									
2131.30.006	0,4		0,8							
2131.30.008	0,8		1,6							
2131.30.010	1		2							
2131.30.012	1,6		3,2							
2131.30.014	3		6							
2131.30.016	4		8							
2131.30.020	6		12							
2131.30.024	8		16							
2131.30.030	12		24							
2131.30.036	16		32							
2131.30.042	24		48							
2131.30.048	32		64							

Load the eyebolt in the pull direction only! For these lifting types, use the turnable eyebolt 2131.31. or the turnable attachment point 2131.34.

ATTACHMENT POINT SCREWABLE PROFILIFT GAMMA

2131.31.



Description:

When replacing, make sure the Allen screw is seated firmly. Adjustable in the direction of force, thus no unintended opening up and overtightening! Screwing in and out by hand possible. The ring must be able to be turned 360° in the screwed tight state.

Material:

Structural parts: High-strength chrome nickel alloyed Q & T steel.
Screws: High-strength screws strength class 10.9, 100 % crack tested

Note:

Ensure even screw-in surface, threads must be screwed in completely.
Each attachment point is provided with an individual serial number

Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.
Set attachment point in permitted loading direction before loading.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:
- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range
Safety factor 4

Other lengths (n) on request!

2131.31. Attachment point screwable profilift gamma

Order No	Rated carrying capacity [t]	d ₂	n	a	b	c	d	e	f
2131.31.008	0.3	M8	15	25	45	10	27	53	35
2131.31.010	0.5	M10	15	25	45	10	27	53	35
2131.31.012	0.7	M12	20	30	55	12	32	63	43
2131.31.016	1.5	M16	25	35	64	14	36	70	50
2131.31.020	2.3	M20	30	40	69	16	41	78	54
2131.31.024	3.2	M24	35	50	86	18	50	93	69
2131.31.030	4.9	M30	45	60	110	25	60	114	90
2131.31.036	7	M36	55	70	132	31	70	136	108
2131.31.042	9	M42	65	80	152	36	72	153	126
2131.31.048	12	M48	75	95	179	42	88	179	148

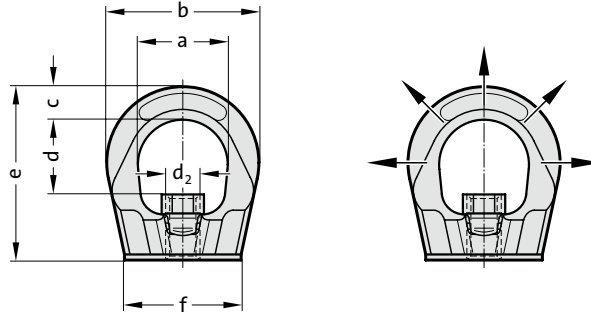
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points	1		2		2		3+4		3+4		2		3+4							
Number of lines	1		1		2		2		2		asym-metrical		asym-metrical							
Angle of inclination/load direction	0°		90°		0°		90°		0-45°		45-60°		0-45°		45-60°					
Order No.	tightening torque [Nm]											carried load in tonnes								
2131.31.008	1											0,3	2	0,6	0,4	0,3	0,6	0,4	0,3	0,3
2131.31.010	1,5											0,5	3	1	0,7	0,5	1	0,7	0,5	0,5
2131.31.012	2											0,7	4	1,4	1	0,7	1,4	1	0,7	0,7
2131.31.016	4											1,5	8	3	2,1	1,5	3	2,2	1,5	1,5
2131.31.020	5											2,3	10	4,6	3,2	2,3	4,8	3,4	2,3	2,3
2131.31.024	6,5											3,2	13	6,4	4,5	3,2	6,7	4,8	3,2	3,2
2131.31.030	12											4,9	24	9,8	6,9	4,9	10,3	7,3	4,9	4,9
2131.31.036	15											7	30	14	9,8	7	14,7	10,5	7	7
2131.31.042	22											9	44	18	12,6	9	18,9	13,5	9	9
2131.31.048	30											12	60	24	16,8	12	25	18	12	12

ATTACHMENT POINT SCREWABLE PROFILIFT GAMMA RING NUT



2131.32.



Description:

Pay attention to firm seating of the ring nut when inserting. Adjustable in the direction of force, thus no unintended opening up and overtensing! Screwing in and out by hand possible. The ring must be able to be turned 360° in the screwed tight state.

Material:

Structural parts: High-strength chrome nickel alloyed Q & T steel.
Nuts: High-strength nuts, strength class 10, 100 % crack tested

Note:

Ensure even screw-in surface, threads must be screwed in completely.
Each attachment point is provided with an individual serial number

Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.
Set attachment point in permitted loading direction before loading.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:
- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range
Safety factor 4.

2131.32. Attachment point screwable profilift gamma ring nut

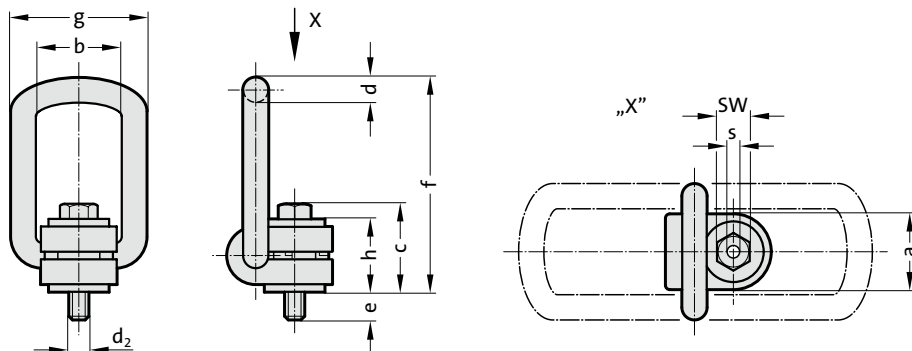
Order No	Rated carrying capacity [t]	d ₂	a	b	c	d	e	f
2131.32.008	0.3	M8	25	45	10	21	55	35
2131.32.010	0.5	M10	25	45	10	21	55	35
2131.32.012	0.7	M12	30	55	12	25	65	43
2131.32.016	1.5	M16	35	64	14	29	72	50
2131.32.020	2.3	M20	40	69	16	34	80	54
2131.32.024	3.5	M24	50	86	18	40	95	69
2131.32.030	4.9	M30	60	110	25	47	115	90

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points										
Number of lines	1	1	2	2	2	2	3+4	3+4	2	3+4
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical	asymmetrical
Order No.	carried load in tonnes									
2131.32.008	1	0,3	2	0,6	0,4	0,3	0,6	0,4	0,3	0,3
2131.32.010	1,5	0,5	3	1	0,7	0,5	1	0,7	0,5	0,5
2131.32.012	2	0,7	4	1,4	1	0,7	1,4	1	0,7	0,7
2131.32.016	4	1,5	8	3	2,1	1,5	3	2,2	1,5	1,5
2131.32.020	4,5	2,3	9	4,6	3,2	2,3	4,8	3,4	2,3	2,3
2131.32.024	5	3,5	10	7	4,9	3,5	7,4	5,2	3,5	3,5
2131.32.030	12	4,9	24	1,4	6,9	4,9	10,3	7,3	4,9	4,9

HOISTING SNAP LINK, OMNIDIRECTIONAL

2131.33.



Description:

The hinged unit is free to rotate through 360°, self-align with the direction of pull and folding. The hoisting Snap Link must be installed in the stress direction before loading, must be able to move freely and may not be supported at an angle.

Do not rotate under load.

Full load bearing capacity in any direction.

Complete with a 100% crack-checked outer and inner hexagonal bolt for universal tool use.

Material:

Alloyed tool steel

Note:

Ensure even screw-in surface, threads must be screwed in completely.

2131.33. Hoisting snap link, omnidirectional

Order No	Rated carrying capacity [t]	d ₂	e	g	a	b	c	d	f	h	s	SW	Tightening torque [Nm]
2131.33.008.055	0.3	M8	11	55	30	35	35	10	85	29	6	13	30
2131.33.010.055	0.63	M10	16	55	30	35	36	10	85	29	6	17	60
2131.33.012.057	1	M12	18	57	33	37	44	14	98	36	8	19	100
2131.33.014.057	1.2	M14	21	57	33	37	45	14	98	36	10	22	120
2131.33.016.057	1.5	M16	24	57	33	37	46	14	98	36	10	24	150
2131.33.018.082	2	M18	26	82	50	54	57	17	140	44	12	30	200
2131.33.020.082	2.5	M20	30	82	50	54	57	17	140	44	12	30	250
2131.33.024.082	4	M24	36	82	50	54	59	17	140	44	14	36	400
2131.33.027.099	4	M27	38	99	60	65	79	23	170	62	17	41	400
2131.33.030.099	5	M30	48	99	60	65	81	23	170	62	17	46	500
2131.33.036.099	7	M36	54	99	60	65	88	23	178	65	22	55	700
2131.33.036.124	8	M36	62	124	77	85	101	27	225	78	22	55	800
2131.33.042.124	10	M42	72	124	77	85	104	27	225	78	24	65	1,000
2131.33.042.158	15	M42	63	158	95	104	112	36	256	86	24	65	1,500
2131.33.048.158	20	M48	72	158	95	104	120	36	259	90	27	75	2,000

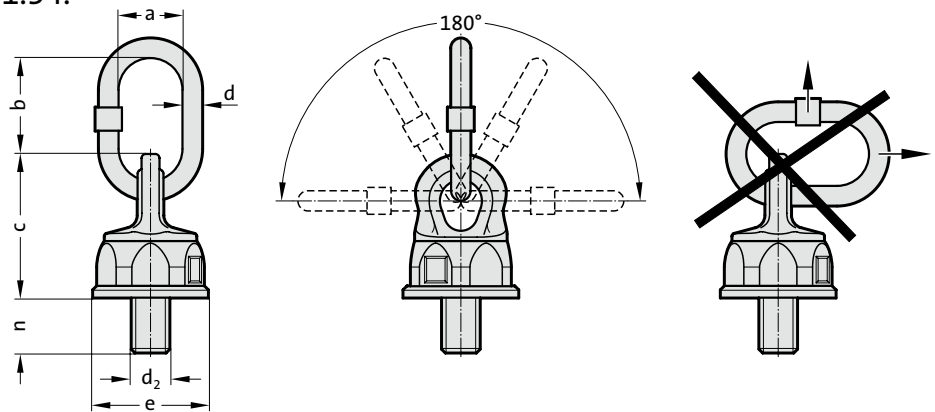
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points										
Number of lines	1	1	2	2	2 symmetrical	2 symmetrical	3 and 4 symmetrical	3 and 4 symmetrical	2 asymmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical	asymmetrical
Order No.	carried load in tonnes									
2131.33.008.055	0,3	0,3	0,6	0,6	0,42	0,3	0,63	0,45	0,3	0,3
2131.33.010.055	0,63	0,63	1,26	1,26	0,88	0,63	1,32	0,95	0,63	0,63
2131.33.012.057	1	1	2	2	1,4	1	2,1	1,5	1	1
2131.33.014.057	1,2	1,2	2,4	2,4	1,7	1,2	2,5	1,8	1,2	1,2
2131.33.016.057	1,5	1,5	3	3	2,1	1,5	3,1	2,2	1,5	1,5
2131.33.018.082	2	2	4	4	2,8	2	4,2	3	2	2
2131.33.020.082	2,5	2,5	5	5	3,5	2,5	5,2	3,7	2,5	2,5
2131.33.024.082	4	4	8	8	5,6	4	8,4	6	4	4
2131.33.027.099	4	4	8	8	5,6	4	8,4	6	4	4
2131.33.030.099	5	5	10	10	7	5	10,5	7,5	5	5
2131.33.036.099	7	7	14	14	9,8	7	14,7	10,5	7	7
2131.33.036.124	8	8	16	16	11,2	8	16,8	12	8	8
2131.33.042.124	10	10	20	20	14	10	21	15	10	10
2131.33.042.158	15	15	30	30	21	15	31,5	22,5	15	15
2131.33.048.158	20	20	40	40	28	20	42	30	20	20

ATTACHMENT POINT SCREWABLE PROFILIFT DELTA



2131.34.



Description:

For loads which are turned and flipped.
 Ball-bearing-mounted – under load turnable by 360°
 Not suitable for continuous turning movements under full load.

Material:

Structural parts: High-strength chrome nickle alloyed Q & T steel.
 Screws: High-strength screws strength class 12.9, 100 % crack tested

Note:

Ensure even screw-in surface, threads must be screwed in completely.
 The threaded connection on the transport belt must be suitable for the force transmission.
 Each attachment point is provided with an individual serial number
 Information about installation and removal, see operating instructions.

Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:
 - no free adjustment is possible in the direction of pull
 - direction of pull does not lie in the specified range
 - when fit closely at edges or surfaces
 Safety factor 4

* 2131.34.014 only by request!

2131.34. Attachment point screwable profilift delta

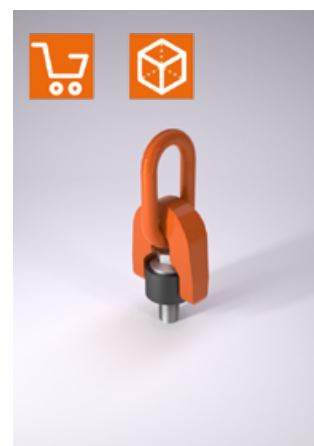
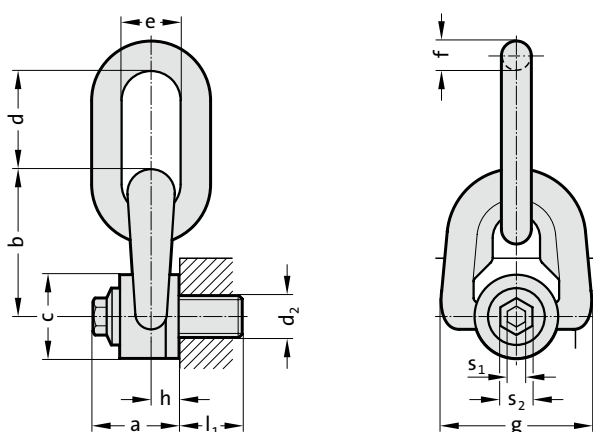
Order No	Rated carrying capacity [t]	d ₂	n	a	b	c	d	e
2131.34.008	0.3	M8	20	30	38	54	13	38
2131.34.010	0.5	M10	20	30	38	54	13	38
2131.34.012	0.7	M12	22	35	48	54	13	38
2131.34.014*	1	M14	22	35	48	54	13	38
2131.34.016	1.5	M16	33	35	48	54	13	38
2131.34.020	2.5	M20	33	35	55	75	16	55
2131.34.024	4	M24	40	40	66	82	17	63
2131.34.030	6	M30	40	50	70	92	23	72
2131.34.036	8	M36	55	50	91	124	23	92
2131.34.042	10	M42	60	65	91	124	27	92
2131.34.048	12.5	M48	68	65	116	124	27	92

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points												
Number of lines	1	1	2	2	2	2	3+4	3+4	2	3+4		
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asym-metrical	asym-metrical		
Order No.	tightening torque [Nm]		carried load in tonnes									
2131.34.008	10		0,6	0,3	1,2	0,6	0,4	0,3	0,6	0,4	0,3	0,3
2131.34.010	10		1	0,5	2	1	0,7	0,5	1	0,75	0,5	0,5
2131.34.012	15		1,4	0,7	2,8	1,4	0,95	0,7	1,4	1	0,7	0,7
2131.34.014*	25		2	1	4	2	1,4	1	2,1	1,5	1	1
2131.34.016	30		2,8	1,5	5,6	3	2,1	1,5	3,1	2,1	1,5	1,5
2131.34.020	80		5	2,5	10	5	3,5	2,5	5,3	3,5	2,5	2,5
2131.34.024	150		7	4	14	8	5,5	4	8,4	6	4	4
2131.34.030	230		10	6	20	12	8,4	6	12,6	9	6	6
2131.34.036	450		12,5	8	25	16	11,2	8	16,8	12	8	8
2131.34.042	600		16	10	32	20	14	10	21	15	10	10
2131.34.048	600		16	12,5	32	25	17,5	12,5	26,5	18	12,5	12,5

TRIPLE VORTICE RING

2131.35.



Description:

The triple vortice rings with double bearing mount for smooth tipping, turning and flipping.
Also turnable 90° for screw-in direction under full load.
Not suitable for continuous turning movement under full load.
The optimised design prevents damage to lifting tackle and the valuable load when turning.
For ring assembly, round slings, wire ropes, hook assemblies, etc.

Material:

High-strength chrome-nickel alloyed Q & T steel,
Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely.
Safety factor 5 - 2131.35.008 through 2131.35.020
Safety factor 4 - 2131.35.048 through 2131.35.056

2131.35. Triple vortice ring

Order No	Rated carrying capacity [t]	a	d ₂	l ₁	s ₁	s ₂	b	c	d	e	f	g	h	Tightening torque [Nm]
2131.35.008	0.4	33	M8	14	8	16	56	30	41	25	10	58	9.5	6
2131.35.010	0.7	33	M10	17	8	16	56	30	41	25	10	58	9.5	10
2131.35.012	1.05	33	M12	21	8	16	56	30	41	25	10	58	9.5	15
2131.35.014	1.4	45	M14	23	8	20	81	45	56	37	14	79	13	30
2131.35.016	2	45	M16	27	8	20	81	45	56	37	14	79	13	50
2131.35.018	2.3	45	M18	27	8	20	81	45	56	37	14	79	13	70
2131.35.020	2.5	45	M20	30	8	20	81	45	56	37	14	79	13	100
2131.35.048	20	100	M48	68	19	30	178	110	135	90	42	180	33	600
2131.35.056	22	104	M56	78	19	30	184	110	135	90	42	190	33	600

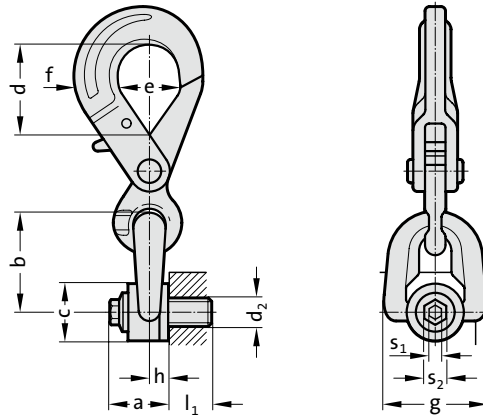
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points										
Number of lines	1	1	2	2	2 symmetrical	2 symmetrical	4 symmetrical	4 symmetrical	2	3 and 4
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical.	asymmetrical
Order No.	carried load in tonnes									
2131.35.008	0,4	0,4	0,8	0,8	0,56	0,4	0,84	0,4	0,4	0,4
2131.35.010	0,7	0,7	1,4	1,4	0,98	0,7	1,47	0,7	0,7	0,7
2131.35.012	1,05	1,05	2,1	2,1	1,47	1,05	2,21	1,05	1,05	1,05
2131.35.014	1,4	1,40	2,8	2,8	1,96	1,4	2,94	1,4	1,4	1,4
2131.35.016	2,0	2,0	4,0	4,0	2,8	2,0	4,2	2,0	2,0	2,0
2131.35.018	2,3	2,3	4,6	4,6	3,22	2,3	4,83	2,3	2,3	2,3
2131.35.020	2,5	2,5	5,0	5,0	3,5	2,5	5,25	2,5	2,5	2,5
2131.35.048	20	20	40	40	28	20	42	20	20	20
2131.35.056	22	22	44	44	30,8	22	46,2	22	22	22

DOUBLE VORTICE HOOK



2131.36.



Description:

The double vortice rings with double bearing mount for smooth tipping, turning and flipping.
 Also turnable 90° for screw-in direction under full load.
 Not suitable for continuous turning movement under full load.
 The optimised design prevents damage to lifting tackle and the valuable load when turning.
 For ring assembly, round slings, wire ropes, hook assemblies, etc.

Material:

High-strength chrome-nickel alloyed Q & T steel,
 Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely.
 Safety factor 5

2131.36. Double vortice hook

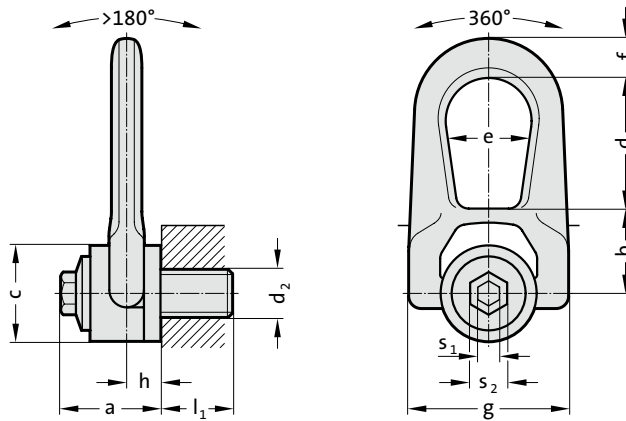
Order No	Rated carrying capacity [t]	a	d ₂	l ₁	s ₁	s ₂	b	c	d	e	f	g	h	Tightening torque [Nm]
2131.36.008	0.4	33	M8	15	8	16	56	30	44	32	23	58	9.5	6
2131.36.010	0.7	33	M10	18	8	16	56	30	44	32	23	58	9.5	10
2131.36.012	1.05	33	M12	21	8	16	56	30	44	32	23	58	9.5	15
2131.36.014	1.4	45	M14	23	8	20	81	45	65	46	29	79	13	30
2131.36.016	2	45	M16	27	8	20	81	45	65	46	29	79	13	50
2131.36.018	2.3	45	M18	27	8	20	81	45	65	46	29	79	13	70
2131.36.020	2.5	45	M20	30	8	20	81	45	65	46	29	79	13	100

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points									
Number of lines	1	1	2	2	2 symmetrical	4 symmetrical	2 asymmetrical	3 and 4 asymmetrical	
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	
Order No.	carried load in tonnes								
2131.36.008	0,4	0,4	0,8	0,8	0,56	0,4	0,84	0,4	0,4
2131.36.010	0,7	0,7	1,4	1,4	0,98	0,7	1,47	0,7	0,7
2131.36.012	1,05	1,05	2,1	2,1	1,47	1,05	2,21	1,05	1,05
2131.36.014	1,4	1,4	2,8	2,8	1,96	1,4	2,94	1,4	1,4
2131.36.016	2	2	4	4	2,8	2	4,2	2	2
2131.36.018	2,3	2,3	4,6	4,6	3,22	2,3	4,83	2,3	2,3
2131.36.020	2,5	2,5	5	5	3,5	2,5	5,25	2,5	2,5

DOUBLE VORTICE RING

2131.37.



Description:

The double vortex ring was especially designed to guarantee lifting under rotation.

Its double joint permits a perfect alignment for load suspension.

Material:

High-strength chrome-nickel alloyed Q & T steel,
Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely.
The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range

Safety factor 4

2131.37. Double vortice ring

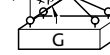
Order No	Rated carrying capacity [t]	a	d ₂	l ₁	s ₁	s ₂	b	c	d	e	f	g	h	Tightening torque [Nm]
2131.37.005	0.1	33	M5	15	8	16	30	30	38	27	14	53	9.5	3
2131.37.006	0.2	33	M6	15	8	16	30	30	38	27	14	53	9.5	4
2131.37.008	0.5	33	M8	15	8	16	30	30	38	27	14	53	9.5	6
2131.37.010	0.9	33	M10	18	8	16	30	30	38	27	14	53	9.5	10
2131.37.012	1.3	33	M12	21	8	16	30	30	38	27	14	53	9.5	15
2131.37.014	1.8	45	M14	23	8	20	40	45	53	38	17	76	13	30
2131.37.016	2.3	45	M16	27	8	20	40	45	53	38	17	76	13	50
2131.37.018	2.3	45	M18	27	8	20	40	45	53	38	17	76	13	70
2131.37.020	2.5	45	M20	30	8	20	40	45	53	38	17	76	13	100
2131.37.022	4.5	62	M22	33	14	24	55	60	83	55	25	115	19	120
2131.37.024	5.5	62	M24	36	14	24	55	60	83	55	25	115	19	160
2131.37.027	6	62	M27	40	14	24	55	60	83	55	25	115	19	200
2131.37.030	6.3	62	M30	45	14	24	55	60	83	55	25	115	19	250

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points

Number of lines

Angle of inclination/load direction

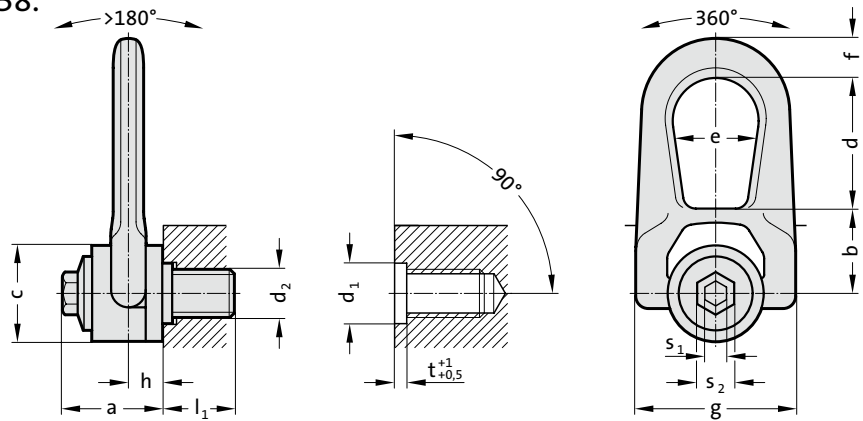


Order No.	carried load in tonnes									
2131.37.005	0,3	0,1	0,6	0,2	0,14	0,1	0,21	0,1	0,1	0,1
2131.37.006	0,4	0,2	0,8	0,4	0,28	0,2	0,42	0,0	0,2	0,2
2131.37.008	1,0	0,5	2,0	1,0	0,7	0,5	1,05	0,5	0,5	0,5
2131.37.010	1,5	0,9	3,0	1,8	1,26	0,9	1,89	0,9	0,9	0,9
2131.37.012	1,5	1,3	3,0	2,6	1,82	1,3	2,73	1,3	1,3	1,3
2131.37.014	2,6	1,8	5,2	3,6	2,52	1,8	3,78	1,8	1,8	1,8
2131.37.016	2,8	2,3	5,6	4,6	3,22	2,3	4,83	2,3	2,3	2,3
2131.37.018	2,5	2,3	5,0	4,6	3,22	2,3	4,83	2,3	2,3	2,3
2131.37.020	2,8	2,5	5,6	5,0	3,5	2,5	5,25	2,5	2,5	2,5
2131.37.022	6,0	4,5	12	9,0	6,3	4,5	9,45	4,5	4,5	4,5
2131.37.024	6,5	5,5	13	11	7,7	5,5	11,55	5,5	5,5	5,5
2131.37.027	6,5	6,0	13	12	8,4	6,0	12,6	6,0	6,0	6,0
2131.37.030	6,5	6,3	13	12,6	8,82	6,3	13,23	6,3	6,3	6,3

DOUBLE VORTICE RING WITH CENTRAL DEVICE



2131.38.



Description:

The double vortex ring with centring device was especially designed to guarantee lifting under rotation. The centring device increases the resistance of the axis in case of lateral mounting.

Material:

High-strength chrome-nickle alloyed Q & T steel,
Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely. The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range

Safety factor 4

2131.38. Double vortice ring with central device

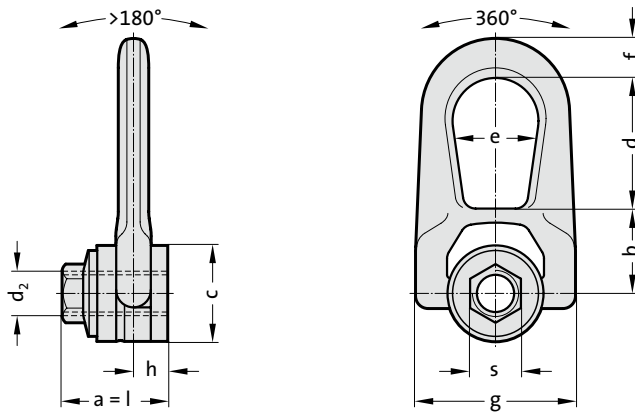
Order No	Rated carrying capacity [t]	d ₂	l ₁	s ₁	s ₂	a	b	c	d	e	f	g	h	d ₁	Tolerance d ₁	t	Tightening torque [Nm]
2131.38.005	0.07	M5	15	8	16	33	30	30	38	27	14	53	9.5	16	+0,25/0	3	3
2131.38.006	0.15	M6	15	8	16	33	30	30	38	27	14	53	9.5	16	+0,25/0	3	4
2131.38.008	0.4	M8	15	8	16	33	30	30	38	27	14	53	9.5	16	+0,25/0	3	6
2131.38.010	0.7	M10	18	8	16	33	30	30	38	27	14	53	9.5	20	+0,25/0	3	10
2131.38.012	1.05	M12	21	8	16	33	30	30	38	27	14	53	9.5	20	+0,25/0	3	15
2131.38.014	1.4	M14	23	8	20	45	40	45	53	38	17	76	13	20	+0,25/0	3	30
2131.38.016	2	M16	27	8	20	45	40	45	53	38	17	76	13	20	+0,25/0	3	50
2131.38.018	2.3	M18	27	8	20	45	40	45	53	38	17	76	13	30	+0,30/0	3	70
2131.38.020	2.5	M20	30	8	20	45	40	45	53	38	17	76	13	30	+0,30/0	3	100
2131.38.022	3.5	M22	33	14	24	62	55	60	83	55	25	115	19	30	+0,30/0	4	120
2131.38.024	4.4	M24	36	14	24	62	55	60	83	55	25	115	19	30	+0,30/0	4	160
2131.38.027	5.7	M27	40	14	24	62	55	60	83	55	25	115	19	36	+0,30/0	4	200
2131.38.030	6	M30	45	14	24	62	55	60	83	55	25	115	19	36	+0,30/0	4	250

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points										
Number of lines	1	1	2	2	2 symmetrical	2 symmetrical	3 and 4 symmetrical	3 and 4 symmetrical	2	3 and 4
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical	asymmetrical
Order No.	carried load in tonnes									
2131.38.005	0,2	0,07	0,4	0,14	0,1	0,07	0,15	0,07	0,07	0,07
2131.38.006	0,3	0,15	0,6	0,3	0,21	0,15	0,32	0,15	0,15	0,15
2131.38.008	0,8	0,4	1,6	0,8	0,56	0,4	0,84	0,4	0,4	0,4
2131.38.010	1,3	0,7	2,6	1,4	0,98	0,7	1,47	0,7	0,7	0,7
2131.38.012	1,5	1,05	3,0	2,1	1,47	1,05	2,21	1,05	1,05	1,05
2131.38.014	2,5	1,4	5,0	2,8	1,96	1,4	2,94	1,4	1,4	1,4
2131.38.016	2,7	2,0	5,4	4,0	2,8	2,0	4,2	2,0	2,0	2,0
2131.38.018	2,5	2,3	5,0	4,6	3,22	2,3	4,83	2,3	2,3	2,3
2131.38.020	2,8	2,5	5,6	5,0	3,5	2,5	5,25	2,5	2,5	2,5
2131.38.022	5,5	3,5	11	7,0	4,9	3,5	7,35	3,5	3,5	3,5
2131.38.024	6,0	4,4	12	8,8	6,16	4,4	9,24	4,4	4,4	4,4
2131.38.027	6,0	5,7	12	11,4	7,98	5,7	11,97	5,7	5,7	5,7
2131.38.030	6,3	6,0	12,6	12	8,4	6,0	12,6	6,0	6,0	6,0

DOUBLE VORTICE RING WITH INTERNAL THREAD

2131.39.



Description:

The double vortex ring with internal thread was especially designed to guarantee lifting under rotation. Its double joint permits a perfect alignment for load suspension.

Material:

High-strength chrome-nickel alloyed Q & T steel

Note:

Ensure even screw-in surface, threads must be screwed in completely. The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range

Safety factor 4

2131.39. Double vortice ring with internal thread

Order No	Rated carrying capacity [t]	d ₂	l	s	a	b	c	d	e	f	g	h	Tightening torque [Nm]
2131.39.008	0.5	M8	45	20	45	40	45	53	38	17	76	13	6
2131.39.010	0.9	M10	45	20	45	40	45	53	38	17	76	13	10
2131.39.012	1.3	M12	45	20	45	40	45	53	38	17	76	13	15
2131.39.014	1.8	M14	45	20	45	40	45	53	38	17	76	13	30
2131.39.016	2.3	M16	45	20	45	40	45	53	38	17	76	19	50
2131.39.018	2.3	M18	62	24	62	55	60	83	55	25	115	19	70
2131.39.020	2.5	M20	62	24	62	55	60	83	55	25	115	19	100
2131.39.022	4.5	M22	62	24	62	55	60	83	55	25	115	19	120

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points

Number of lines

Angle of inclination/load direction

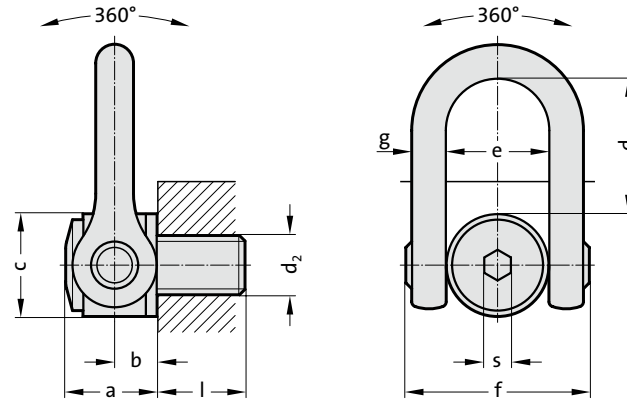
Number of lines	1	1	2	2	2 symmetrical	2 symmetrical	3 and 4 symmetrical	3 and 4 symmetrical	2 asymmetrical.	3 and 4 asymmetrical.
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical.	asymmetrical.

Order No.	carried load in tonnes									
2131.39.008	1,0	0,5	2,0	1,0	0,7	0,5	1,05	0,5	0,5	0,5
2131.39.010	1,5	0,9	3,0	1,8	1,26	0,9	1,89	0,9	0,9	0,9
2131.39.012	1,5	1,3	3,0	2,6	1,82	1,3	2,73	1,3	1,3	1,3
2131.39.014	2,6	1,8	5,2	3,6	2,52	1,8	3,78	1,8	1,8	1,8
2131.39.016	2,8	2,3	5,6	4,6	3,22	2,3	4,83	2,3	2,3	2,3
2131.39.018	2,5	2,3	5,0	4,6	3,22	2,3	4,83	2,3	2,3	2,3
2131.39.020	2,8	2,5	5,6	5,0	3,5	2,5	5,25	2,5	2,5	2,5
2131.39.022	6,0	4,5	12	9,0	6,3	4,5	9,45	4,5	4,5	4,5

DOUBLE VORTEX RING SCREW



2131.40.



Description:

The double vortex ring screw was especially designed for the lifting and rotating of heavy loads. Load bearing capacity in all directions and perfect alignment for load suspension.

Material:

High-strength chrome-nickle alloyed Q & T steel,
Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely.
The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

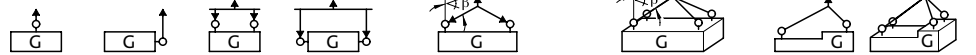
- no free adjustment is possible in the direction of pull
 - direction of pull does not lie in the specified range
- Safety factor 4

2131.40. Double vortex ring screw

Order No	Rated carrying capacity [t]	d ₂	l	s	a	b	c	d	e	f	g	Tightening torque [Nm]
2131.40.024	5.5	M24	36	19	61	31	70	98	73	149	33	160
2131.40.030	8.5	M30	45	19	61	31	70	98	73	149	33	250
2131.40.033	10.5	M33	50	19	61	31	70	98	73	149	33	250
2131.40.036	12	M36	54	19	61	31	70	98	73	149	33	320
2131.40.039	14	M39	58	19	61	31	70	98	73	149	33	320
2131.40.042	15	M42	63	19	61	31	70	98	73	149	33	400
2131.40.045	16	M45	63	19	61	31	70	98	73	149	33	400
2131.40.048	20	M48	68	19	79	38	90	123	91	182	45	600
2131.40.052	21	M52	68	19	79	38	90	123	91	182	45	600
2131.40.056	25	M56	78	19	79	38	90	123	91	182	45	600
2131.40.064	32.1	M64	90	19	79	38	95	123	91	182	45	600
2131.40.072	25	M72	90	19	79	38	95	123	91	182	45	600
2131.40.080	32.1	M80	90	19	79	38	100	123	91	182	45	600
2131.40.090	32.1	M90	90	19	79	38	100	123	91	182	45	600
2131.40.100	32.1	M100	90	19	79	38	110	123	91	182	45	600

Max. carried load "G" in tonnes for various types of attachment

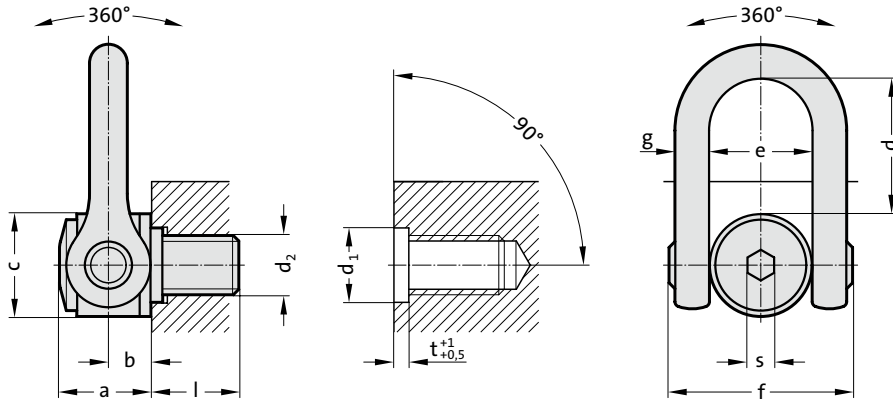
Type of attachment/Arrangement of the suspension points



Number of lines	1	1	2	2	2 symmetrical	3 and 4 symmetrical	2	3 and 4		
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asym-metrical	asym-metrical
Order No.	carried load in tonnes									
2131.40.024	9,0	5,5	18	11	7,7	5,5	11,55	5,5	5,5	5,5
2131.40.030	14	8,5	28	17	11,9	8,5	17,85	8,5	8,5	8,5
2131.40.033	14,5	10,5	29	21	14,7	10,5	22,05	10,5	10,5	10,5
2131.40.036	15	12	30	24	16,8	12	25,2	12	12	12
2131.40.039	17	14	34	28	19,6	14	29,4	14	14	14
2131.40.042	15,5	15	31	30	21	15	31,5	15	15	15
2131.40.045	15	16	30	32	22,4	16	33,6	16	16	16
2131.40.048	22	20	44	40	28	20	42	20	20	20
2131.40.052	23	21	46	42	29,4	21	44,1	21	21	21
2131.40.056	25	25	50	50	35	25	52,5	25	25	25
2131.40.064	32,1	32,1	64,2	64,2	44,94	32,1	67,41	32,1	32,1	32,1
2131.40.072	25	25	50	50	35	25	52,5	25	25	25
2131.40.080	32,1	32,1	64,2	64,2	44,94	32,1	67,41	32,1	32,1	32,1
2131.40.090	32,1	32,1	64,2	64,2	44,94	32,1	67,41	32,1	32,1	32,1
2131.40.100	32,1	32,1	64,2	64,2	44,94	32,1	67,41	32,1	32,1	32,1

DOUBLE VORTEX RING SCREW WITH CENTERING

2131.41.



Description:

The double vortex ring screw with centring device was especially designed for the lifting and rotating of heavy loads. The centring device increases the resistance of the axis in case of lateral mounting. Load bearing capacity in all directions and perfect alignment for load suspension.

Material:

High-strength chrome-nickle alloyed Q & T steel,
Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely.
The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

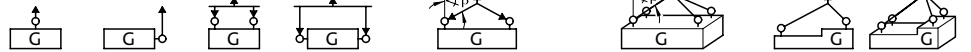
When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:
- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range
Safety factor 4

2131.41. Double vortex ring screw with Centering

Order No	Rated carrying capacity [t]	d ₂	l	s	a	b	c	d	e	f	g	d ₁	Tolerance d ₁	t	Tightening torque [Nm]
2131.41.024	4.5	M24	36	19	61	31	70	98	73	149	33	30	+0,3/0	4	160
2131.41.030	7.7	M30	45	19	61	31	70	98	73	149	33	36	+0,3/0	4	250
2131.41.033	8.5	M33	50	19	61	31	70	98	73	149	33	48	+0,5/0	6	250
2131.41.036	11	M36	54	19	61	31	70	98	73	149	33	48	+0,5/+0,1	6	320
2131.41.042	13	M42	63	19	61	31	70	98	73	149	33	48	+0,5/+0,1	6	400
2131.41.045	14.5	M45	63	19	61	31	70	98	73	149	33	48	+0,5/+0,1	6	400
2131.41.048	17	M48	68	19	79	38	90	123	91	182	45	64	+0,6/+0,1	8	600
2131.41.056	22	M56	78	19	79	38	90	123	91	182	45	64	+0,6/+0,1	8	600
2131.41.064	25	M64	90	19	79	38	95	123	91	182	45	74	+0,6/+0,1	10	600

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points

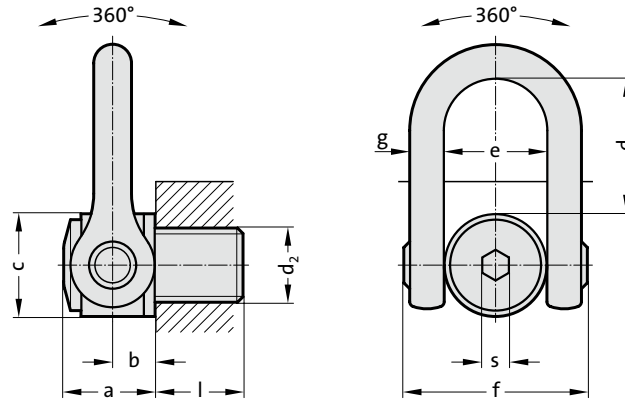


Number of lines	1	1	2	2	2 symmetrical	3 and 4 symmetrical	2 asymmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Order No.	carried load in tonnes							
2131.41.024	9,0	4,5	18	9,0	6,3	4,5	9,45	4,5
2131.41.030	14	7,7	28	15,4	10,78	7,7	16,17	7,7
2131.41.033	14,5	8,5	29	17	11,9	8,5	17,85	8,5
2131.41.036	15	11	30	22	15,4	11	23,1	11
2131.41.042	15	13	30	26	18,2	13	27,3	13
2131.41.045	15	14,5	30	29	20,3	14,5	30,45	14,5
2131.41.048	22	17	44	34	23,8	17	35,7	17
2131.41.056	25	22	50	44	30,8	22	46,2	22
2131.41.064	25	25	50	50	35	25	52,5	25

DOUBLE VORTEX RING SCREW MEGA DSS



2131.42.



Description:

The Mega double vortex ring screw was specially designed to lift and rotate under a load of up to 50 tons. It can be used directly with the lifting equipment (hook of the travelling crane).

Load bearing capacity in all directions and perfect alignment for load suspension.

Material:

High-strength chrome-nickle alloyed Q & T steel,

Screws: high-strength screws, min. strength category 10.9, 100 % crack inspected

Note:

Ensure even screw-in surface, threads must be screwed in completely.

The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range

Safety factor 4

2131.42. Double vortex ring screw Mega DSS

Order No	Rated carrying capacity [t]	d ₂	l	s	a	b	c	d	e	f	g	Tightening torque [Nm]
2131.42.064	33	M64	100	36	127	64	140	186	143	278	69	600
2131.42.072	35	M72	110	36	127	64	140	186	143	278	69	700
2131.42.080	40	M80	120	36	127	64	140	186	143	278	69	800
2131.42.090	45	M90	135	36	127	64	140	186	143	278	69	900
2131.42.100	60	M100	150	36	127	64	140	186	143	278	69	1000

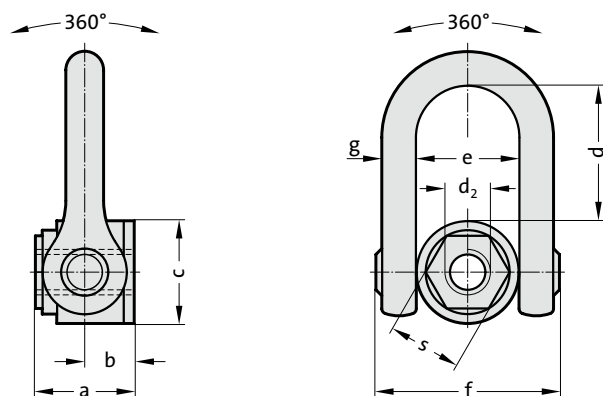
Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points

Number of lines	1	1	2	2	2 symmetrical	2 symmetrical	3 and 4 symmetrical	3 and 4 symmetrical	2 asymmetrical	3 and 4 asymmetrical
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical	asymmetrical
Order No.	carried load in tonnes									
2131.42.064	33	33	66	66	46,2	33	69,3	33	33	33
2131.42.072	35	35	70	70	49	35	73,5	35	35	35
2131.42.080	40	40	80	80	56	40	84	40	40	40
2131.42.090	45	45	90	90	63	45	94,5	45	45	45
2131.42.100	60	60	120	120	84	60	126	60	60	60

DOUBLE VORTICE RING WITH INTERNAL THREAD

2131.43.



Description:

The double vortex ring with internal thread was especially designed for the lifting and rotating of heavy loads. Its double joint permits a perfect alignment for load suspension.

Material:

High-strength chrome-nickel alloyed Q & T steel

Note:

Ensure even screw-in surface, threads must be screwed in completely. The threaded connection on the transport belt must be suitable for the force transmission.

Each attachment point is provided with an individual serial number
Information about installation and removal, see operating instructions.
Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range

Safety factor 4

2131.43. Double vortice ring with internal thread

Order No	Rated carrying capacity [t]	d ₂	l	s	a	b	c	d	e	f	g	Tightening torque [Nm]
2131.43.024	5.5	M24	66	50	66	31	70	98	73	149	33	160
2131.43.027	6.5	M27	66	50	66	31	70	98	73	149	33	200
2131.43.030	8.5	M30	66	50	66	31	70	98	73	149	33	250
2131.43.033	10.5	M33	66	50	66	31	70	98	73	149	33	250
2131.43.036	12	M36	66	50	66	31	70	98	73	149	33	320
2131.43.039	14	M39	89	60	89	38	95	123	91	182	45	320
2131.43.042	15	M42	89	60	89	38	95	123	91	182	45	400
2131.43.045	16	M45	89	60	89	38	95	123	91	182	45	400
2131.43.048	20	M48	89	60	89	38	95	123	91	182	45	600
2131.43.052	21	M52	89	60	89	38	95	123	91	182	45	600

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points

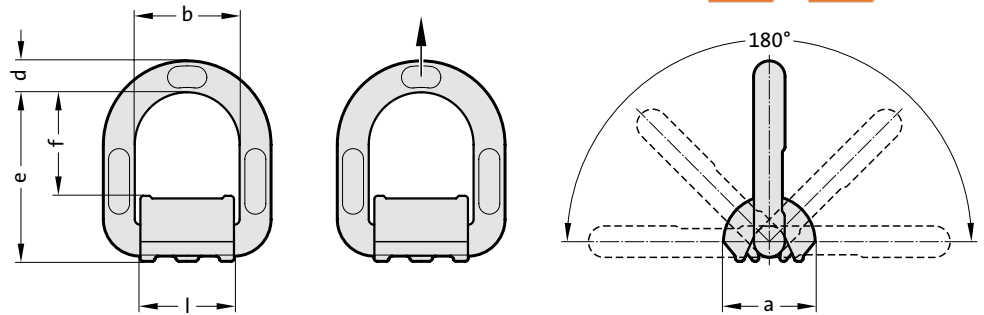


Number of lines	1	1	2	2	2 symmetrical	3 and 4 symmetrical	3 and 4 symmetrical	2 asymmetrical	3 and 4 asymmetrical	
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°		
Order No.	carried load in tonnes									
2131.43.024	9,0	5,5	18	11	7,7	5,5	11,55	5,5	5,5	5,5
2131.43.027	10	6,5	24	13	9,1	6,5	13,65	6,5	6,5	6,5
2131.43.030	12	8,5	28	17	11,9	8,5	17,85	8,5	8,5	8,5
2131.43.033	14,5	10,5	29	21	14,7	10,5	22,05	10,5	10,5	10,5
2131.43.036	15	12	30	24	16,8	12	25,2	12	12	12
2131.43.039	17	14	34	28	19,6	14	29,4	14	14	14
2131.43.042	19	15	38	30	21	15	31,5	15	15	15
2131.43.045	15	16	30	32	22,4	16	33,6	16	16	16
2131.43.048	22	20	44	40	28	20	42	20	20	20
2131.43.052	23	21	46	42	29,4	21	44,1	21	21	21

ATTACHMENT POINT WELDABLE PROFILIFT ETA



2131.50.



Description:

For welding work, the conditions according to DIN EN ISO 14341 apply. Welding work may only be performed by a welder with qualification according to EN 287-1.

Material:

Weld-on bracket: S355 J2 G3
Ring: high-strength alloyed steel

Note:

Information about installation and removal, see operating instructions. Load capacity according to operating instructions or load capacity table in the specified directions of pull.

When selecting the arrangement, make sure that unequal loading does not occur, e.g. if:

- no free adjustment is possible in the direction of pull
- direction of pull does not lie in the specified range
- when fit closely at edges or surfaces

2131.50. Attachment point weldable profilift eta

Order No	Rated carrying capacity [t]	Size	a	b	d	e	f	l
2131.50.006	1,12	6	36	40	11	67	42	35
2131.50.008	2	8	37	42	13	73	45	37
2131.50.010	3,15	10	41	45	16,5	80	47	40
2131.50.013	5,3	13	61	55	22	97	53	50
2131.50.016	8	16	63	70	25	120	73	64
2131.50.022	15	22	89	97	33	163	92	90

Max. carried load "G" in tonnes for various types of attachment

Type of attachment/Arrangement of the suspension points										
Number of lines	1	1	2	2	2	2	3+4	3+4	2	3+4
Angle of inclination/load direction	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymmetrical	asymmetrical
Order No.	carried load in tonnes									
2131.50.006	1,12	1,12	2,24	2,24	1,5	1,12	2,3	1,6	1,12	1,12
2131.50.008	2	2	4	4	2,8	2	4,2	3	2	2
2131.50.010	3,15	3,15	6,3	6,3	4,4	3,15	6,6	4,7	3,15	3,15
2131.50.013	5,3	5,3	10,6	10,6	7,4	5,3	11,2	7,9	5,3	5,3
2131.50.016	8	8	16	16	11,3	8	16,9	12	8	8
2131.50.022	15	15	30	30	21	15	31,8	22,5	15	15