Lashing strap ZG 35

with ratchet RA 40

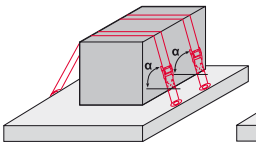
The handy system for lashing down and direct lashing of light loads for commercial purposes and light trailers is characterized by a smaller strap width. Normally used with double J hooks and a length of 6 m.

Strap width	35 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	280 daN
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	1,000 daN
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	2,000 daN

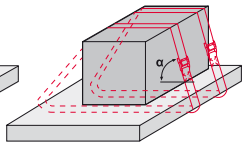
Road transport applications:

Frictional lashing

The load can be secured with 1 lashing strap



two-piece

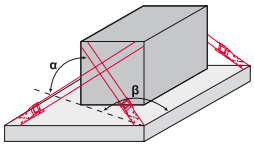


one-piece

Angle	Dynamic friction factor					
	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	The load can be secured with 1 Lashing strap [daN ~ kg]					
90	60	140	250	420	700	1,260
85	50	130	250	410	690	1,250
80	50	130	240	410	680	1,240
70	50	130	230	390	650	1,180
60	50	120	210	360	600	1,090
50	40	100	190	320	530	960
40	30	80	160	260	440	800
30	30	70	120	210	350	630

Direct lashing

The load can be secured with 4 lashing straps



two-piece

Angle		Dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	β [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
15–35	21–30	-	-	-	3,500	4,650	6,400	9,900
15–35	31–40	1,600	1,950	2,450	3,150	4,200	5,750	8,950
15–35	41–50	1,300	1,650	2,100	2,750	3,600	5,000	7,750
15–35	51–60	1,050	1,300	1,700	2,200	2,900	4,050	6,350
36–50	21–30	-	-	2,350	3,100	4,300	6,250	10,150
36–50	31–40	1,250	1,600	2,150	2,850	3,950	5,800	9,500
36–50	41–50	1,050	1,350	1,850	2,550	3,550	5,300	8,700
36–50	51–60	-	1,100	1,550	2,200	3,100	4,650	7,550

Accessories:

DKR 50
Delta link with snap hook

RH 50
Double J hook

D 40
Delta link

Order example:
ZG 35 x 6000 / 1000 Z DKR
Lashing strap system 35, two-piece lashing strap, with ratchet RA 40 and 2 units DKR as end fittings, strap width 35 mm, length l_G = 6,000 mm

Lashing strap ZG 48

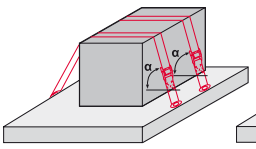
with ratchet RA 20

The special system for truck interior lashing of light loads between lashing rails by means of the E truck fitting is thanks to the ratchet also suitable for general applications if equipped with double J hooks.

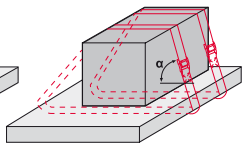
Strap width	48 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	300 daN
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	800 daN
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	1,600 daN

Road transport applications:

Frictional lashing
The load can be secured with 1 lashing strap



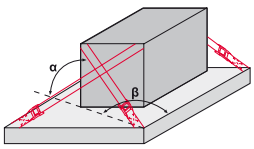
two-piece



one-piece

Angle	Dynamic friction factor					
	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	The load can be secured with 1 Lashing strap [daN ~ kg]					
90	60	150	270	450	750	1,350
85	60	140	260	440	740	1,340
80	60	140	260	440	730	1,320
70	60	140	250	420	700	1,260
60	50	120	230	380	640	1,160
50	40	110	200	340	570	1,030
40	40	90	170	280	480	860
30	30	70	130	220	370	670

Direct lashing
The load can be secured with 4 lashing straps



two-piece

Angle		Dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	β [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
15–35	21–30	-	-	-	2,800	3,750	5,150	7,900
15–35	31–40	1,250	1,550	1,950	2,550	3,350	4,600	7,150
15–35	41–50	1,050	1,300	1,700	2,200	2,850	4,000	6,200
15–35	51–60	800	1,050	1,350	1,750	2,300	3,250	5,100
36–50	21–30	-	-	1,850	2,500	3,450	5,000	8,100
36–50	31–40	1,000	1,300	1,700	2,300	3,150	4,650	7,600
36–50	41–50	850	1,100	1,500	2,050	2,850	4,200	6,950
36–50	51–60	-	900	1,250	1,750	2,500	3,700	6,050

Accessories:

SZ 20
E truck fitting

RH 100
Double J hook

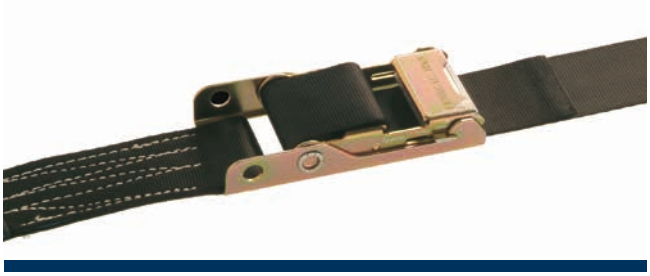
Order example:
ZG 48 x 3900 / 800 Z SZ
Lashing strap system 48, two-piece lashing strap, with ratchet RA 20 and 2 units SZ as end fittings, strap width 48 mm, length l_G = 3,900 mm

Lashing strap ZG SP 48

with tightener SP 20

The special system with E truck fitting for truck interior lashing of light loads can be fixed between the lashing rails in a very short time thanks to the SP 20 tightener.

Strap width	48 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	-
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	800 daN
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	-



Accessories:

SZ 20
E truck fitting

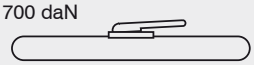
RH 100
Double J hook

Order example:
ZG SP 48 x 3900 / 800 Z SZ
Lashing strap system 48, two-piece lashing strap, with tightener SP 20 and 2 units SZ as end fittings, strap width 48 mm, length l_G = 3,900 mm

Lashing strap ZG KL 35

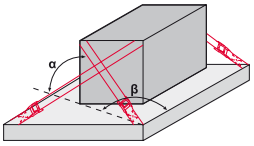
with cam buckle KL 14

The one-piece system with a strong cam buckle is suitable for securing and bundling very light loads in order to form loading units.

Strap width	35 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	-
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	-
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	700 daN 

Road transport applications:

Direct lashing
The load can be secured with 4 lashing straps



one-piece

Angle		Dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	β [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
15–35	21–30	-	-	-	2,450	3,250	4,500	6,900
15–35	31–40	1,100	1,350	1,700	2,200	2,950	4,050	6,250
15–35	41–50	900	1,150	1,450	1,950	2,500	3,500	5,400
15–35	51–60	700	900	1,200	1,550	2,050	2,850	4,450
36–50	21–30	-	-	1,650	2,200	3,000	4,350	7,100
36–50	31–40	850	1,100	1,500	2,000	2,750	4,050	6,650
36–50	41–50	700	950	1,300	1,800	2,500	3,700	6,100
36–50	51–60	-	750	1,100	1,500	2,150	3,250	5,300

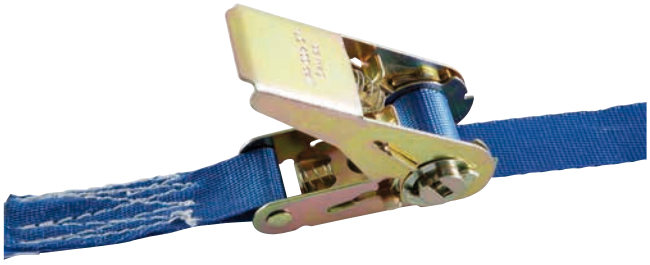
Order example:
ZG KL 35 x 5000 / 700 E
Lashing strap system 35, one-piece lashing strap, with cam buckle KL 14 and strap width 35 mm, length l_G = 5,000 mm

Lashing strap ZG 25

with ratchet RA 10

Our space-saving lashing strap system is ideal for direct lashing of very light loads in cars and on roof racks providing also for private purposes safe transportation according to regulations. Available with double J hook and a length of 4 m or as one-piece lashing strap with a length of 5 m.

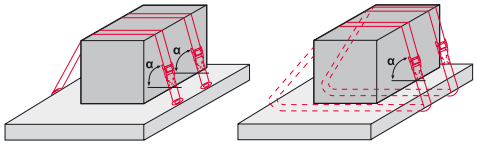
Strap width	25 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	-
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	250 daN
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	500 daN



Road transport applications:

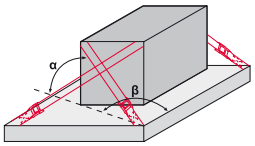
Frictional lashing

This lashing strap is not designed for frictional lashing according to EN 12195. For special applications, please contact our technical service department.



two-piece one-piece

Direct lashing
The load can be secured with 4 lashing straps



two-piece

Angle		Dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	β [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
15–35	21–30	-	-	-	850	1,150	1,600	2,450
15–35	31–40	400	450	600	750	1,050	1,400	2,200
15–35	41–50	300	400	500	650	900	1,250	1,900
15–35	51–60	250	300	400	550	700	1,000	1,550
36–50	21–30	-	-	550	750	1,050	1,550	2,500
36–50	31–40	300	400	500	700	950	1,450	2,350
36–50	41–50	250	300	450	600	850	1,300	2,150
36–50	51–60	-	250	350	550	750	1,150	1,850

Accessories:

ZSH 10
S-hook

RH 10
Double J hook

D 10
Delta link

Order example:
ZG 25 x 4000 / 250 Z RH
Lashing strap system 25, two-piece lashing strap, with ratchet RA 10, strap width 25 mm and RH as end fittings, length l_G = 4,000 mm

Lashing strap ZG KL 25

with cam buckle KL 5

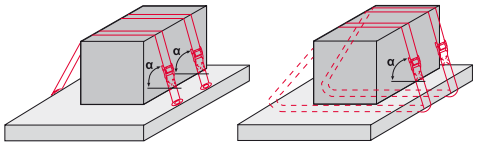
Our smallest lashing system according to load securing standards is ideal for securing and bundling very light loads in cars and for luggage lashing, available as a one-piece lashing strap with cam buckle and a length of 5 m.

Strap width	25 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	-
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	-
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	250 daN

Road transport applications:

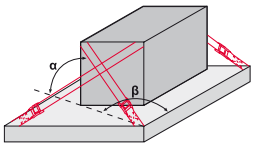
Frictional lashing

This lashing strap is not designed for frictional lashing according to EN 12195. For special applications, please contact our technical service department.



two-piece one-piece

Direct lashing
The load can be secured with 4 lashing straps



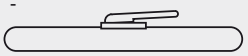
two-piece

Angle		Dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	β [°]	The load can be secured with 4 lashing straps [daN ~ kg]						
15–35	21–30	-	-	-	850	1,150	1,600	2,450
15–35	31–40	400	450	600	750	1,050	1,400	2,200
15–35	41–50	300	400	500	650	900	1,250	1,900
15–35	51–60	250	300	400	550	700	1,000	1,550
36–50	21–30	-	-	550	750	1,050	1,550	2,500
36–50	31–40	300	400	500	700	950	1,450	2,350
36–50	41–50	250	300	450	600	850	1,300	2,150
36–50	51–60	-	250	350	550	750	1,150	1,850

Order example:
ZG KL 25 x 5000 / 250 E
Lashing strap system 25, one-piece lashing strap, with cam buckle KL 5 and strap width 25 mm, length l_G = 5,000 mm

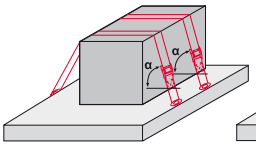
Lashing strap ZG Roll

Quick-action lashing strap with ratchet and round hook. For the fast and simple securing of loads in passenger cars or trailers. Thanks to its ratchet system, the lashing strap may be rolled up at the touch of a button.

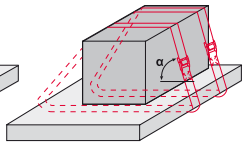
Strap width	50 mm
STF Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	75 daN
LC – two-piece Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	750 daN
LC – one-piece strap Allowed lashing capacity of the lashing strap in strapping	- 

Road transport applications:

Frictional lashing
The load can be secured with 1 lashing strap



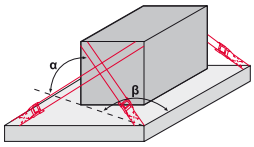
two-piece



one-piece

Angle	Dynamic friction factor					
	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	The load can be secured with 1 lashing strap [daN ~ kg]					
90	10	30	60	110	180	330
85	10	30	60	110	180	330
80	10	30	60	110	180	330
70	10	30	60	100	170	310
60	10	30	50	90	160	290
50	10	20	50	80	140	250
40	10	20	40	70	120	210
30	-	10	30	50	90	160

Direct lashing
The load can be secured with 4 lashing straps



two-piece

Angle		Dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
α [°]	β [°]	The load can be secured with 4 lashing straps [daN ~ kg]						
15–35	21–30	-	-	-	2,600	3,500	4,800	7,400
15–35	31–40	1,200	1,450	1,850	2,350	3,150	4,300	6,700
15–35	41–50	1,000	1,250	1,600	2,050	2,700	3,750	5,800
15–35	51–60	750	1,000	1,300	1,650	2,150	3,050	4,750
36–50	21–30	-	-	1,750	2,350	3,200	4,650	7,600
36–50	31–40	900	1,200	1,600	2,150	2,950	4,350	7,100
36–50	41–50	750	1,000	1,400	1,900	2,650	3,950	6,500
36–50	51–60	-	850	1,150	1,650	2,350	3,450	5,650

Order example:
ZG Roll 50 x 3000 / 750 RH
Lashing strap system ZG Roll with ratchet and Double J hook Strap width 50 mm,
length l_G = 3,000 mm