LIFTING SLING FITTINGS

FOR GREEN PIN TYCAN® CHAIN



Applications

Green Pin Tycan® fibre chain offers all the performance and flexibility of steel chain but is eight times lighter than steel. A choice of five sizes of lifting chain with matching fittings allows you to manufacture a complete chain assembly with a Working Load Limit of up to 21.2 t. The soft touch and light weight makes Green Pin Tycan® easy to use, allows quicker application and greatly reduces the potential of damage to cargo, a critical factor when handling objects with sensitive surfaces.

For specific product information the following product groups can be found on the mentioned page:

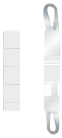
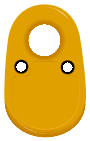
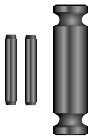
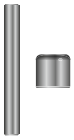
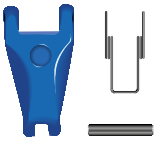
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Range

Green Pin® supplies a range of grade 10 Green Pin Tycan® chain fittings, specially developed for use with Green Pin Tycan®, include a connecting link, a shortening hook and a sling hook. The clevis of the hooks and the bearing surface of the connecting link have been specially designed to perfectly fit Green Pin Tycan® chain links. This guarantees safe assembly of the chain and its fittings. Chain fittings for chain sizes 11x15 (2.6 t) up to 15x40 (10.3 t).

Below Green Pin Tycan® lifting sling fittings can be found:
- Links, e.g. Green Pin® Master Link, Green Pin Tycan® Connecting Link
- Chain, e.g. Green Pin Tycan® Lifting Chain
- Hooks, e.g. Green Pin Tycan® Sling Hook, Green Pin Tycan® Grab Hook

Design

Green Pin Tycan® Connecting Link and Green Pin Tycan® Sling Hook, Green Pin Tycan® Grab Hook with clevis connection are supplied unassembled and ready for immediate use. Assembly is quick and easy.

Possibility to shorten Green Pin Tycan® fibre chain sling by means Green Pin Tycan® Grab Hook.

Grade 10 lifting sling fittings specially designed for Tycan® fibre chain are marked with:
- manufacturer's symbol - e.g. GP
- size in mm - e.g. 30
- traceability code - e.g. HA
- steel grade - e.g. 10
- item code (specific products) - e.g. UMJT
- origin (specific products) - e.g. France

As prescribed by the Machinery Directive 2006/42/EC our hooks, master links and connecting links are supplied with a CE Declaration of Incorporation (CE IIB), stating the products are in compliance with the requirements of the machinery directive. These products do not have a CE marking, since CE markings are only to be provided for machines, whereas hooks, master links and connecting links are components of machines, and not machines themselves. Providing components with a CE marking is an incorrect interpretation of the Machinery Directive.

Machinery definition according to Machinery Directive 2006/42/EC – Article 2 – definitions (a) and Machinery Regulation 2023/1230/EU:

"An assembly of linked parts or components, at least one of which moves and which are joined together, intended for lifting loads and whose only power source is directly applied human effort."

"The maximum working load shall be prominently marked on the lifting machinery. The marking shall be legible, indelible and in an un-coded form. Where the maximum working load depends on the configuration of the lifting machinery, each operating position shall be provided with a load plate indicating, preferably in diagrammatic form or by means of tables, the working load permitted for each configuration."

This definition means that a sling is a Machine and that the hooks, master links and connecting links are not considered as a machine themselves, but as components of a machine. The CE and the WLL markings in consequence, are mandatory only on the assembled sling tag as the sling is the machine according to MD 2006/42/EC. This rule is still valid with the new Machine Regulation 2023/1230 which will replace the MD cited previously within early 2027.

Finish

All grade 10 Green Pin Tycan® lifting sling fittings are painted. Grade 10 Green Pin Tycan® lifting fittings are painted blue. The same colour as our other Grade 10 lifting sling fittings for steel chain.

Certification

Specific details of certificate availability can be found on each product page. Please verify your certification requirements with Green Pin® at the time of order.

Instructions for use

Grade 10 Green Pin Tycan® lifting sling fittings should be inspected before use to ensure that:

- all markings are legible.
- all lifting sling fittings of the complete sling are made of the same steel grade 10.
- a lifting sling fitting with the correct WLL has been selected with respect to the sling design. For further details, refer to the EN 818-4 with values for grade 10 and ASME B30.9 standard for Chain Slings.
- the pin, bolt, nut, bush or any other locking system cannot move or vibrate out of position.
- lifting sling fittings are free from nicks, gouges, and cracks.
- lifting sling fittings are not heat treated, modified, repaired, or reshaped by machining or bent. (This may affect their Working Load Limit).
- lifting sling fittings items are not distorted or unduly worn. (Maximum allowable wear is 10 % of the original diameter).
- the latch of the hook(s) is present and functional.
- the hook is never side-, tip- or back- loaded.
- the hook is supporting the load correctly.
- the latch should not be supporting any load.
- only use the lifting sling fittings for in-line lifting.

Grade 10 Green Pin Tycan® lifting sling fittings must be regularly inspected in accordance with the safety standards given in the country of use. This is required because the products in use may be affected by issues such as wear, misuse, and overloading, which may lead to deformation and alteration of the material structure. Inspection should take place at least every six months (follow the local rules in the country of use), and more frequently when the links are used in severe operating conditions.

For Green Pin Tycan® Lifting Chain is a specific user manual available, please find the digital user manual on **greenpin.com/faq**.

Testing

Generally load rated products are proof load and MPI tested.
For specific information on certificates, we refer to the separate paragraph on certification.

Grade 10 Green Pin Tycan® lifting sling fittings are proof load tested at the following loads:

for link size	Working Load Limit (WLL)	Proofload* (PL)
mm	t	t
11x15	2.6	6.5
11x20	4	10
15x25	5	12.5
13x30	6.8	17
15x40	10.3	25.75

* The Green Pin Tycan® chain itself has a proof load of 2 times the WLL

Temperature

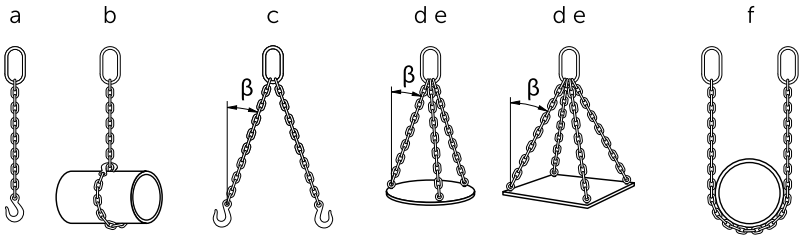
The Green Pin Tycan® lifting fibre chain temperature range is -40 °C up to +70 °C. This chain cannot be used above +70 °C.

Green Pin Tycan® lifting assembly fittings

Below, you can find an overview of the complete lifting system and complementary products currently on offer, including the article codes for individual components.

		2.6 t WLL (1 leg sling)	4 t WLL (1 leg sling)	5 t WLL (1 leg sling)	6.8 t WLL (1 leg sling)	10.3 t WLL (1 leg sling)
Master links	 UMS UMTS	GPUMS18 (5.4 t) GPUMTS22 (6.5 t)	GPUMS22 (8.2 t) GPUMTS28 (11 t)	GPUMS22 (8.2 t) GPUMTS28 (11 t)	GPUMS25 (11.2 t) GPUMTS36 (17.5 t)	GPUMS30 (16 t) GPUMTS38 (21.2 t)
Connecting links	 UMJT UMJ	GPUMJT15	GPUMJT20	GPUMJ13	GPUMJT30	GPUMJT40
Shorteners	 UCRCT	GPUCRCT15	GPUCRCT20	GPUCRCT25	GPUCRCT30	GPUCRCT40
Chain	 FCHLIFT	FCHLIFT1115	FCHLIFT1120	FCHLIFT1525	FCHLIFT1330	FCHLIFT1540
Sleeve	 SLEEVE	SLEEVE111550	SLEEVE112050	SLEEVE152550	SLEEVE133050	SLEEVE154050
Hooks	 UCSCT	GPUCSCT15	GPUCSCT20	GPUCSCT25	GPUCSCT30	GPUCSCT40

Working Load Limit table for Green Pin Tycan® chain slings to EN 818-4 with values for grade 10

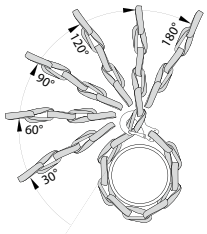


1 leg chain **2 leg chains** **3 and 4 leg chains** **Basket**

Type of hitch		a	b	c	c	d e	d e	f
Angle of inclination (ß)		-*	-	0°-45°	45°-60°	0°-45°	45°-60°	-**
Load factor		**1**	**0.8**	**1.4**	**1**	**2.1**	**1.5**	**1.5**
Working Load Limit (t)	11x15	2.6	2.08	3.6	2.6	5.46	3.9	3.9
	11x20	4.0	3.2	5.6	4.0	8.4	6.0	6.0
	15x25	5.0	4.0	7.0	5.0	10.5	7.5	7.5
	13x30	6.8	5.44	9.52	6.8	14.28	10.2	10.2
	15x40	10.3	8.2	14.4	10.3	21.2	15.5	15.5

When using multi leg slings make sure that the angles between the lifting points and sling legs are within the range marked on the sling. The angle ß, which is the angle between the sling leg and the vertical, shall never exceed 60°.

* See below capacity reduction table of angles of choke less than 120°
** See below capacity reduction table for non-vertical chain sling legs

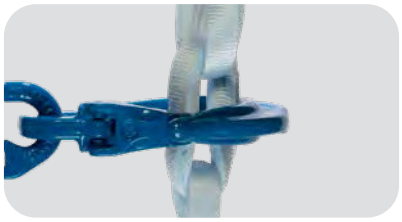


Angle of Choke	Rated load of single leg chain sling	Rated load (t) of single leg chain sling				
	%	11x15	11x20	15x25	13x30	15x40
120°-180°	80	2.08	3.20	4.00	5.44	8.24
90°-119°	65	1.69	2.60	3.25	4.42	6.70
60°-89°	55	1.43	2.20	2.75	3.74	5.6
30°-59°	40	1.04	1.60	2.00	2.75	4.12

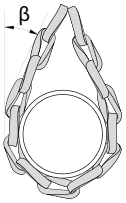
In a choker configuration you can use two different choker connections:



The hook attached to a link,
called anchored basket hitch.



The hook around a link,
called traditional choker hitch.



Angle ß	Rated load	Min. dia.	Rated load (t)				
	%	mm	11x15	11x20	15x25	13x30	15x40
0°-5°	150	120	3.90	6.00	7.50	12.20	15.45
6°-30°	135	120	3.51	5.40	6.75	9.18	13.91
31°-45°	120	120	3.12	4.80	6.00	8.16	12.36
46°-60°	100	120	2.60	4.00	5.00	6.80	10.30

Connect Green Pin Tycan® Lifting Chain to Green Pin Tycan® lifting sling fittings or to certified components with a maximum surface roughness of 5 microns and adhering to below values:

link size	Working Load Limit	minimum pin diameter	minimum clevis width	maximum clevis width
mm	t	mm	mm	mm
11x15	2.6	13	15.5	18
11x20	4	16	20.5	24
15x25	5	16	26	31
13x30	6.8	20	31	37
15x40	10.3	24	41	48

Configuration examples

1 leg chain



2 leg chain

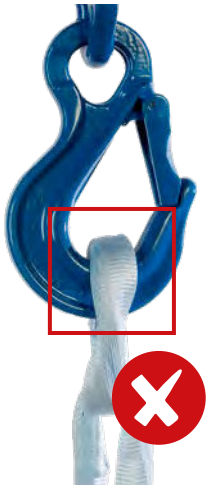


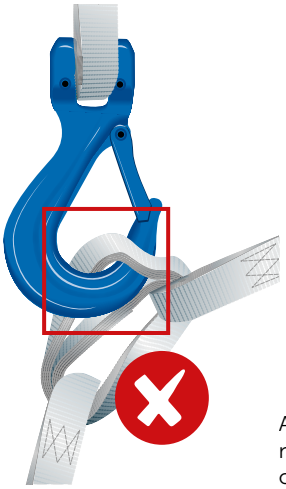
3 and 4 leg chain



Examples of do's and don'ts

Connecting Green Pin Tycan® Lifting Chain directly into hooks (components) where the width/clevis is more than required maximum clevis width is not acceptable. Doing so can cause the layers to spread apart, which in the utmost consequence could have a negative effect on the strength of the chain.
The only exception is in a anchored basket hitch.





Also make sure that the hook is not hooked in between the layers of the Green Pin Tycan® link.

The unloaded link must never be placed between the loaded link and the body hook.



