

LIFT EQUIPMENTS

G-FLEX

BALANCE CHAIN

***COST
EFFECTIVE
COMFORT***

www.guvenclikhalat.com.tr

G-Flex is a brand of Güven Çelik Halat.



G-FLEX

MODELS

MODEL	UNIT WEIGHT	OUTER DIAMETER
GF075	1.12 ± 0.20	24.0 ± 2.0
GF100	1.49 ± 0.20	27.0 ± 2.1
GF125	1.88 ± 0.20	30.0 ± 2.2
GF150	2.24 ± 0.20	32.0 ± 2.3
GF175	2.63 ± 0.20	35.0 ± 2.2
GF200	2.98 ± 0.20	38.0 ± 2.5
GF250	3.73 ± 0.20	42.0 ± 2.5
GF300	4.47 ± 0.20	44.0 ± 2.7
GF350	5.22 ± 0.20	48.0 ± 2.8
GF400	5.96 ± 0.20	52.0 ± 2.9

G-Flex which is a Güven Çelik Halat brand, is a balance chain which is produced utilizing the method of coating the high quality electric arc-welded chain with liquid PVC. G-Flex which is used in elevator systems, safely performs the duty of balancing the rope weight while moving upwards and downwards along the cabin space shaft.

WHY G-FLEX?

Especially, when high rise elevators (generally exceeding 30 mts and up to 3,5mt/sec speed) are concerned, due to the weight of suspension ropes and travelling cables.

- The rope tension on driving sheave fluctuates
- The load on the sheave and motor is varying.

Compensation chains are mainly used;

- To minimize rope tension fluctuations on driving sheave and
- To make constant the load applied on to the sheave and the motor regardless of car position.

Indeed, as a brief expression, compensation chains are used to balance the dynamic load varying of elevators which is caused by suspension ropes weight.

LOOP DIAMETER	DIAMETER OF CHAIN	BREAKING LOAD	MAX. SUSPENSION LENGHT
610.0	6.0 ± 0.5	≥15.63	160
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610.0	7.0 ± 0.5	≥18.13	147
610.0	7.8 ± 0.5	≥23.68	130
660.0	8.5 ± 0.5	≥29.97	145
660.0	9.5 ± 0.5	≥29.97	160
660.0	10.0 ± 0.5	≥37.00	142
660.0	11.0 ± 0.5	≥44.70	153
690.0	12.0 ± 0.5	≥52.28	150
690.0	13.0 ± 0.5	≥62.53	150



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BENEFITS OF G-FLEX

- **Balanced rope tension on sheave**
- **Constant load on sheave and motor**
- **Avoiding from dangerous cases might result because of excessive traction force differentiations**
- **Easy installation opportunity for more precise and smooth elevator**
- **Opportunity to use low torque motor i.e. low cost of motor and energy and smaller room need**
- **Noiseless**
- **Cheap and simple installation**

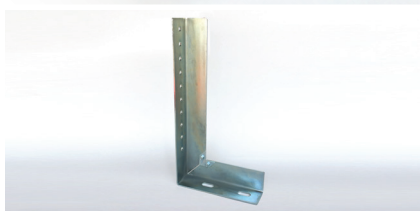
ACCESORIES



**COMPENSATION
CHAIN
ROLLER GUIDE**



GRIP



CONSOLE



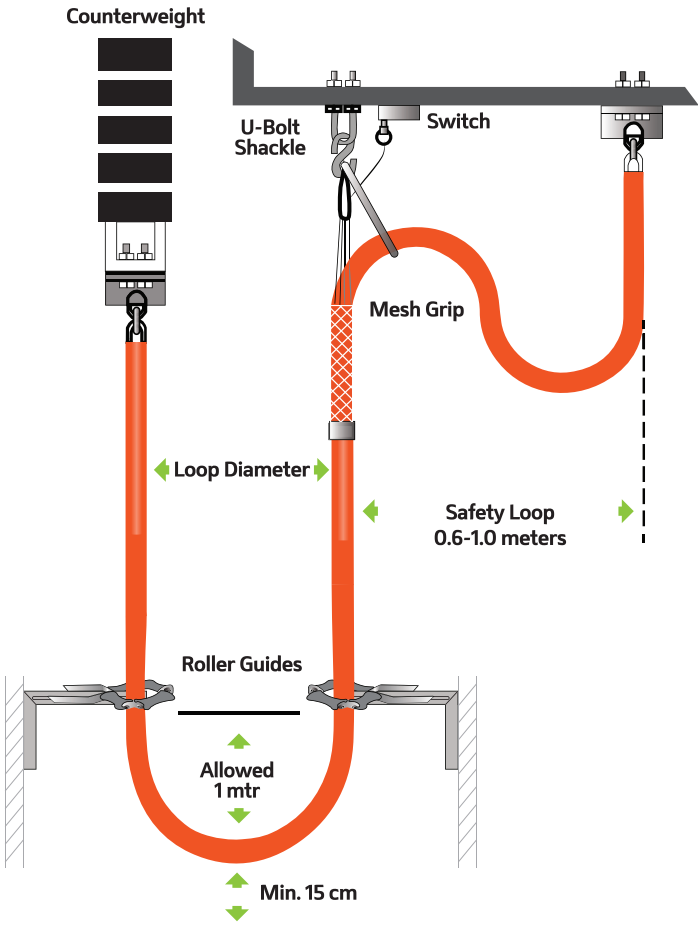
**RINGBOLT AND
CHAIN SWIVEL**

HOW TO INSTALL

Generally compensation chains are installed in a way that one end is attached to the bottom of the car frame and the other end by passing through the chain roller guide which is at the bottom of the well and then fixed to the bottom of the counterweight frame. During installation, it should be provided that compensation chain will run with its natural bending loop diameter. Otherwise if the installation bending loop diameter is bigger than the natural one, this will cause while elevator runs the chain will weave. In this

case, because of weaving the chain might hang out to other parts inside the well and then naturally might give harm them. As a result may damage the overall operation of the system. Therefore, fixing point of the compensation chain should be the point where the natural loop matches. This is highly important for the run of the elevator in a safe way.

When you fixed compensation chain according to its natural loop, the one end of the chain fixed to the car bottom frame might be at the edge. This might result in distortion of the alignment of the car. In such a case, car should be aligned. Elevator manufacturers sometimes by placing some additional hanging stable weights to car frame bottom or by other methods but should set the needed compensation.



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How to Order

In general terms, the reason why there is compensation chain is to balance the weight of suspension ropes. This is why, in order to get this balance in any assembled elevator, the total weight of the compensation chain at unit running distance should be equal to the weight of the suspension ropes at that unit running distance. Our staff can help you determine which size of G-Flex to use.

Please give us below information in your contact:

- Number of hoist ropes per car
- Outer diameter of the hoist ropes
- Stranding of the hoist ropes (i.e. 8x19S)
- Suspension Type (i.e. 1:1, 2:1, other...)
- Number of G-Flex cables per car
- Length of G-Flex cable needed.

Important Note: All the data here in this documents are only for general acknowledgment. None of the content is binding our company.

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