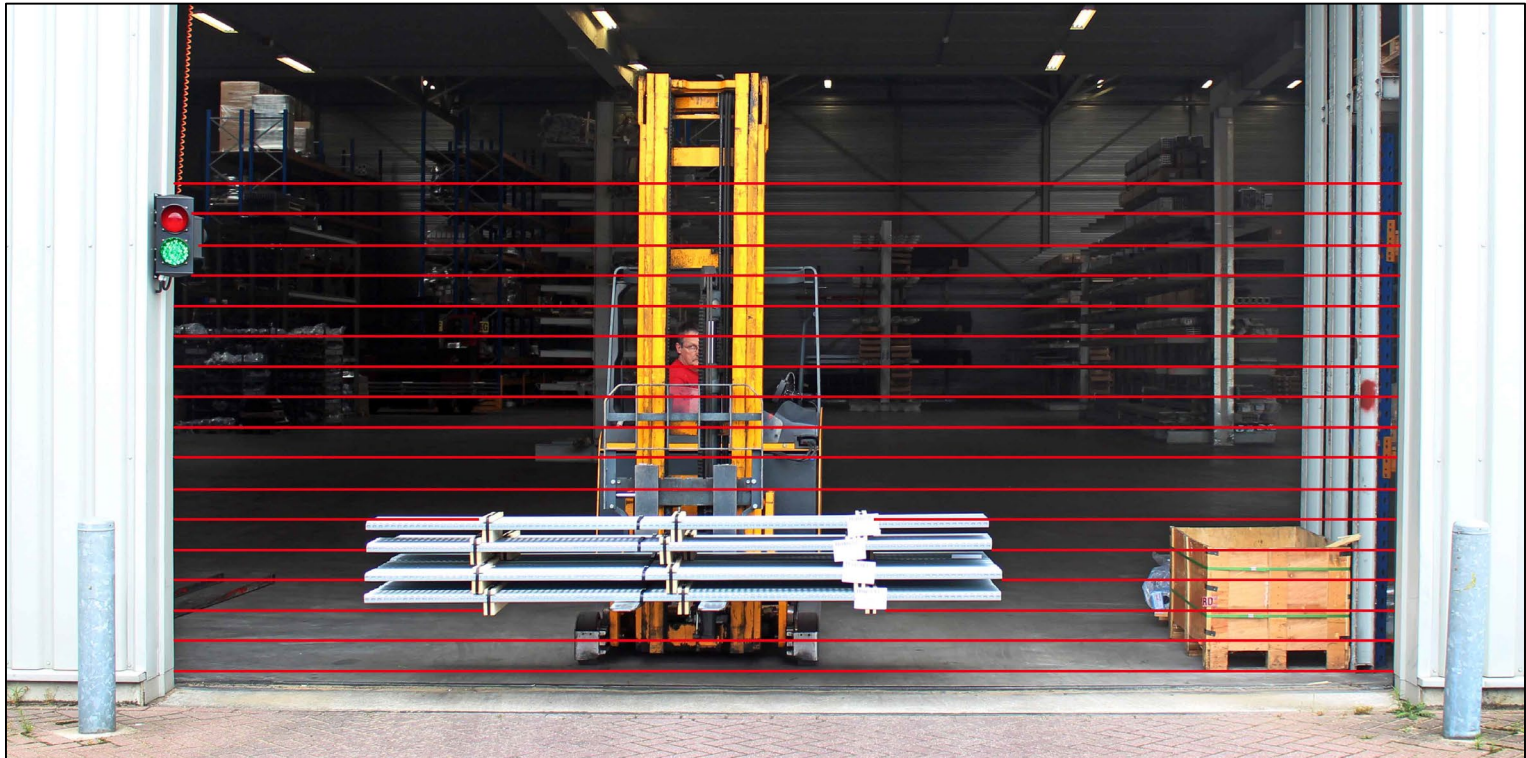


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INTRODUCTION

FORCELC2 CLASS2 LIGHT CURTAIN



1980 – 2020: 40 YEARS OF INNOVATIONS

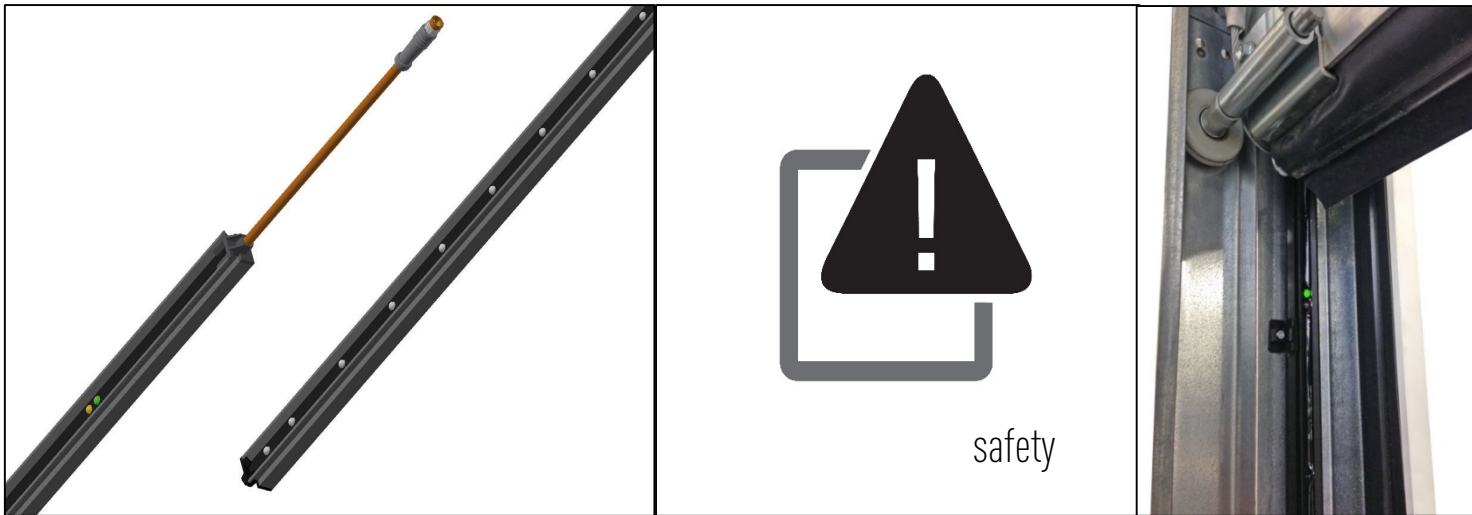
FORCELC2 SAFETY

Until only recently, light curtains were not self testing. In practice this means that they could only be used in combination with an additional safety device, like a traditional safety edge system. With the introduction of forceLC2 - type 2 light curtains, this is now history. Our forceLC2 light curtain is class2, approved as stand-alone safety device on sectional overhead doors. Main advantages of a light curtain versus other solutions:

- easy to install in the vertical track system
- very unlikely to get damaged
- for doors up to 10 meters wide
- the absolute safest solution (non-contact)
- connection on the OSE inputs, no extra programming!

And last but not least, as a total solution the light curtain is cost effective with a list price of euro 359,- !

One model fits all, active height is 2550 mm. and IP67 protected so suitable for rough and wet conditions. Compliant with EN-12978 and EN-12453.



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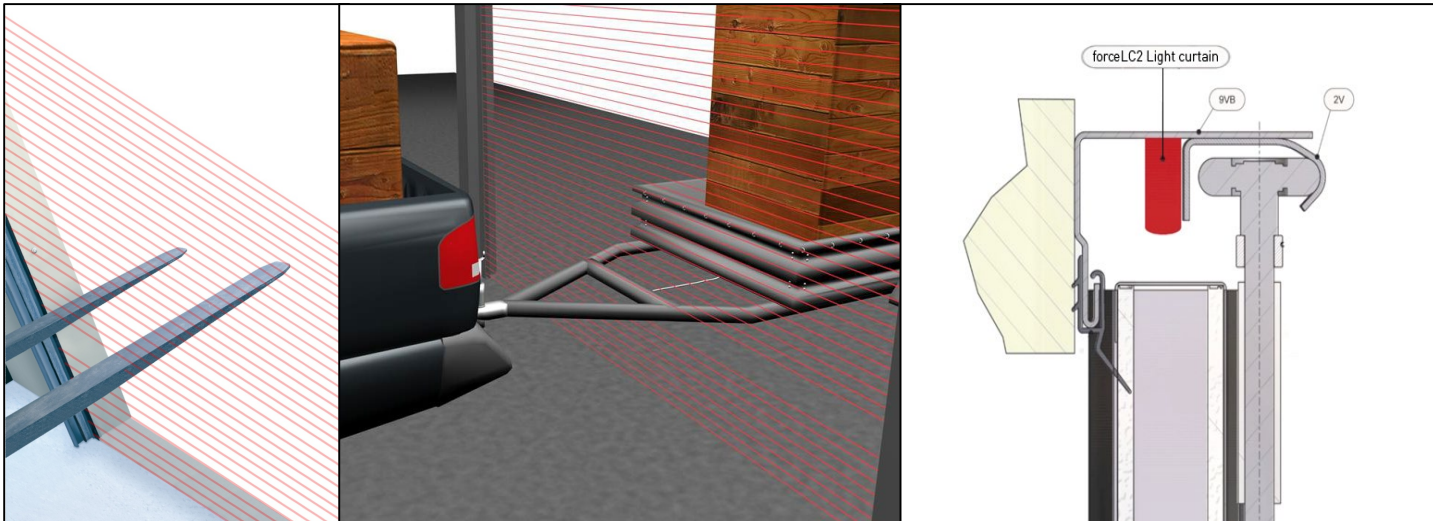


WHY USE A LIGHT CURTAIN

According to the EN safety norms for automated (overhead) doors, any person should be protected against injuries or death caused by the door. This means that up to a height of 2.500mm safety devices should be installed to prevent persons from being hit by a moving door blade.

So far, traditional photo eyes, or pneumatic (air) safety edges were installed in the bottom seal of a door, connected via a spiral cord to the motor control box. Not only is this type of solution complex to install, it features limited safety. A light curtain, originated from the elevator industry, is an easier and safer solution.

The way it works: When the door closes, each of the single light-beams (24 in total) are covered in sequence (the so called blanking). Unexpected obstacles anywhere in the curtain range, will send a signal to door opener to stop.



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RECENT UPGRADES

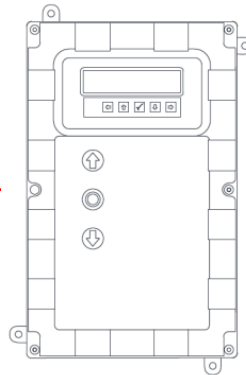
FlexiForce has recently upgraded forceLC2 with:

- Length of the total curtain is now 2.640mm.
- Active height is 2.520mm.
- Distance between LED's above the 500mm decreased from 195mm to 180mm.
- Additional mounting holes in the light curtain to save mounting space.
- Not necessary to change polarity of the transmitter with door width <4000mm.
- Different LED's, easier to align the light curtain.
- No error codes when door is stopped half way or during opening.
- Possibility to close the door from any random position.
- Blanking function only requires a covering of last 2 activated LED's

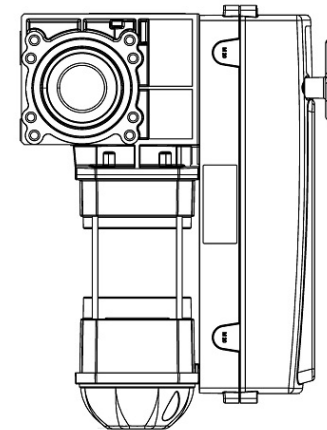
This advance light curtain, forceLC2, connects to all types and brands of operators. But of course, the ideal combination is with the FlexiForce line of industrial door openers: force! Contact us to hear all the advantages of using it!



forceLC2



forceIQ



force100XQ/...

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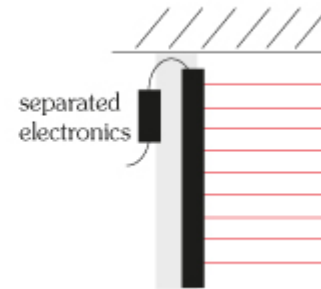
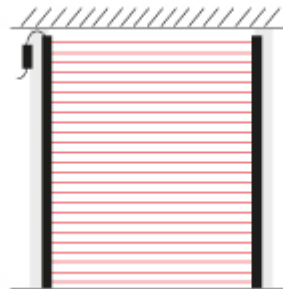
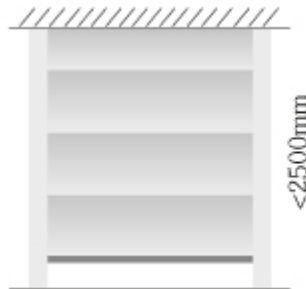


APPLICATION

The door leaf must be vertical when touching the first beams, to prevent any error signal. Always 2 following light beams need to be covered during movement of the door.

Calculated minimum opening height of doors per system:

Door type						
Minimum openings height (mm)						
Normal lift	3245					
High lift	3445					
Low head room	3380					
Vertical lift	2555					
Following the roof	X	3-25°	26-30°	31-35°	36-40°	41-45°
	min. OPH	3250	3215	3195	3175	3055
Following high lift	3450					
Following low head room	3320					
3" Normal lift	3215					
3" Vertical lift	2555					
3" High lift	3415					



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10

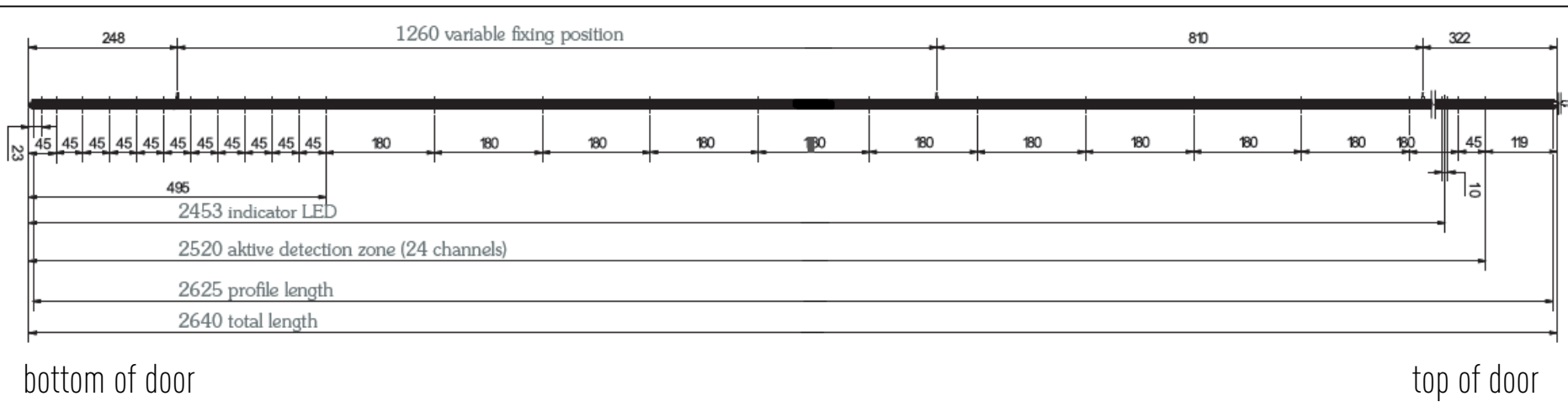
FORCELC2 - TECHNICAL

What's in the box?

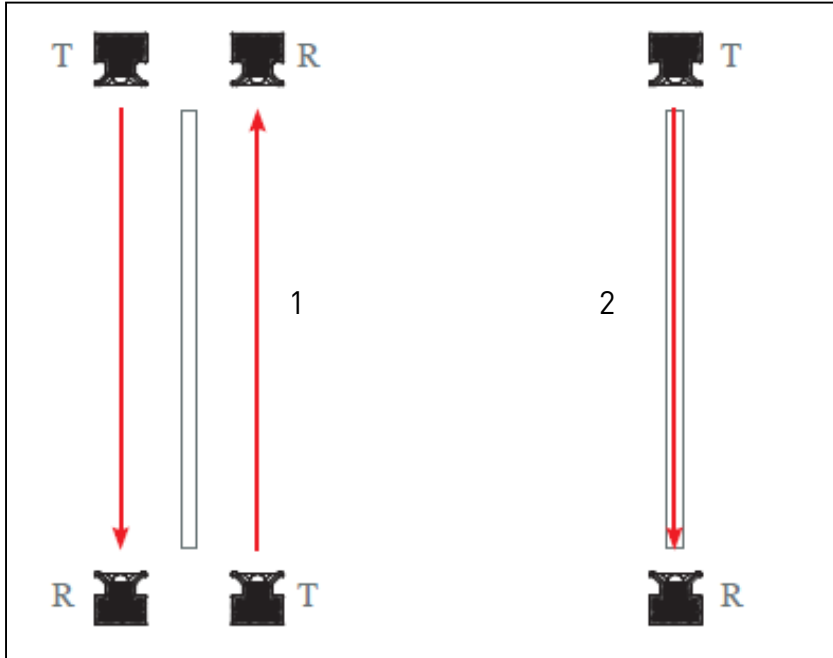
- 2 x profiles for the light curtain (receiver and transmitter)
- 10 mounting brackets (LIGI-JK10) + screws
- 24 beams
- 5m TX and 15m RX cable
- Installation manual (EN/NL)

Technical specifications:

- Spread of beams, 24 in total:
 - First 495: each 45mm a beam
 - After 495: each 180mm a beam
- Total length: 2.640mm
- Active detection zone: 2.520mm
- Connect through: OSE



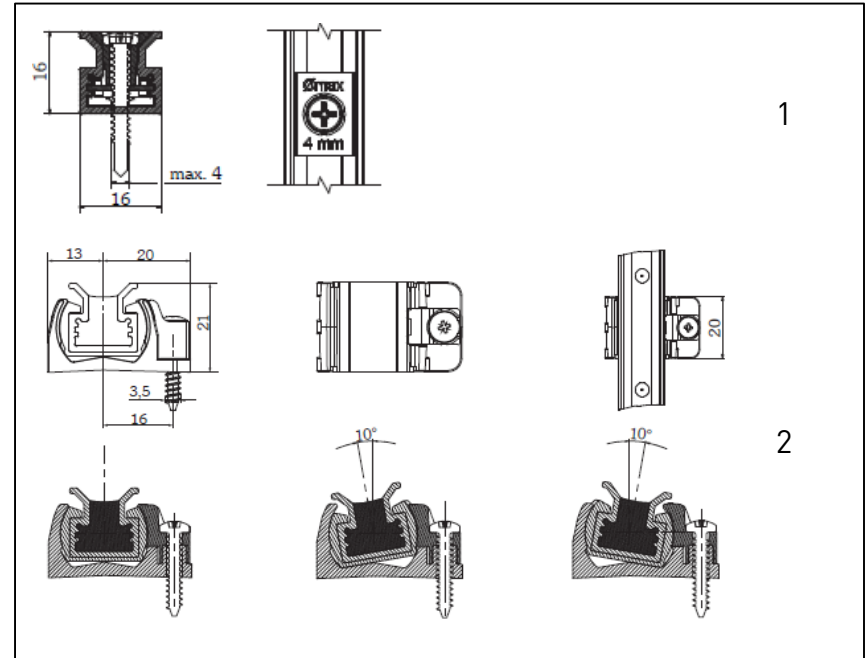
FORCELC2 - TECHNICAL



Options to install forceLC2 light curtain:

1. Besides the door
2. In the doorway (commonly used)

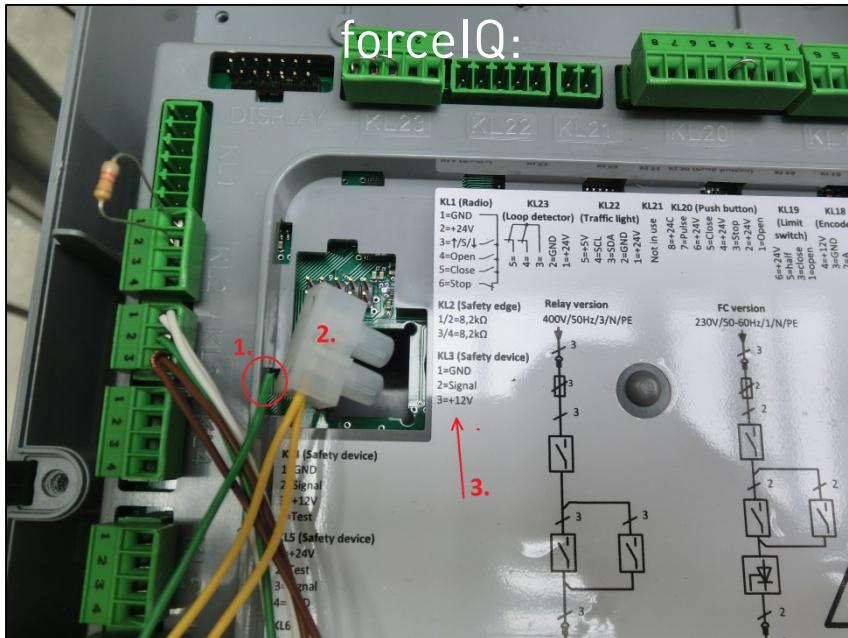
Remark: blanking function only possible when curtain is installed in doorway.



Options to mount forceLC2 light curtain:

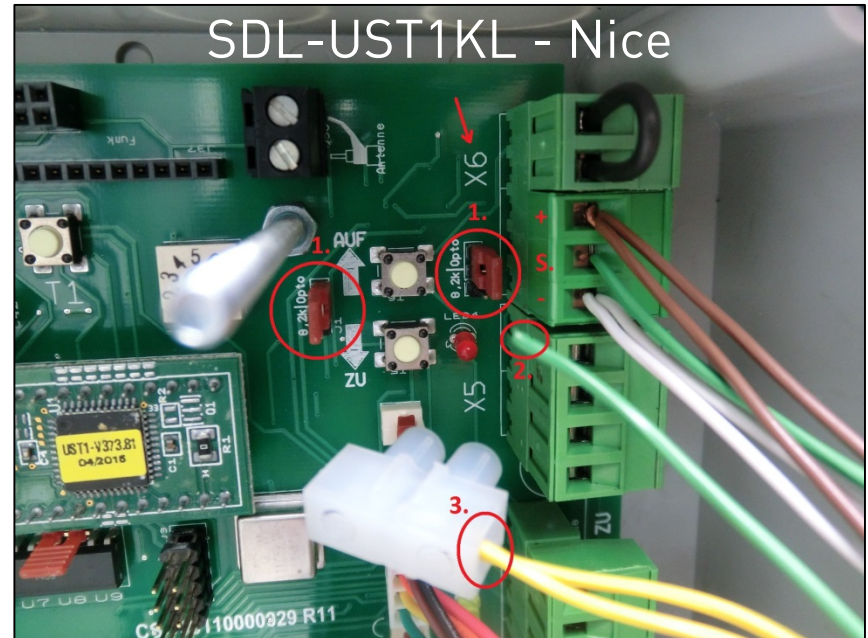
1. Direct mounting (no alignment options)
2. By using alignment clamps, adjustable alignment of the beams.

FORCELC2 - CONNECT



- 1: Do not connect the green wire of the transmitter
- 2: Connect the yellow wires together
- 3: Connect remaining wires to KL3 as shown on sticker.

Software adjustments needed:
Choose for **OSE** in the menu **Safety device / OSE 1**
setup KL3

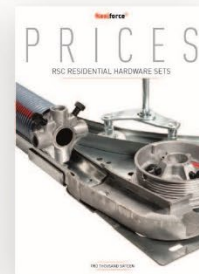
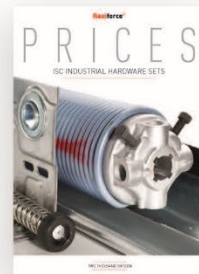
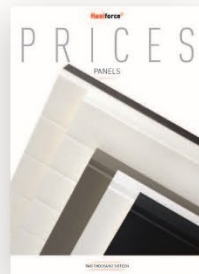
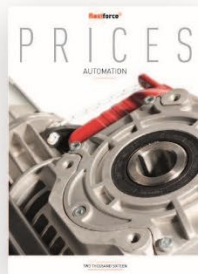
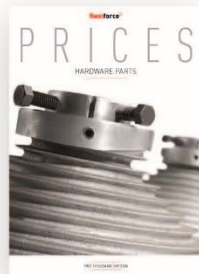


- 1: Make sure both jumpers are on opto.
- 2: Do not connect the green wire of the transmitter
- 3: Connect the yellow wires together.

Brown wires to X6: +
Green wire (receiver) to X6: S
White wires to X6: -

No software adjustments needed.

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CELEBRATING 40 YEARS OF INNOVATIONS

1980-2020



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