Mounting instructions

**Fig. 1A: Centered Product**

L1 = L2

<table>
<thead>
<tr>
<th>L1</th>
<th>L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>70...200 m / 230...656 ft. Max.</td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 1B: Off-center product**

\[ \Delta L = \frac{L1 - L2}{2} \]

\[ \Delta L_{\text{max}} = 10\% \times \frac{L1 + L2}{2} \]

<table>
<thead>
<tr>
<th>L1 + L2</th>
<th>\Delta L</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 m / 230 ft.</td>
<td>3.5 m / 11.5 ft. Max.</td>
</tr>
<tr>
<td>140 m / 459 ft.</td>
<td>7 m / 23 ft. Max.</td>
</tr>
<tr>
<td>200 m / 656 ft.</td>
<td>10 m / 32.8 ft. Max.</td>
</tr>
</tbody>
</table>

**Fig. 2**

\[ \Delta T = f(L) \]

\[ L (m) \]

Prohibited area

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http://qr.tesensors.com/XY0008
Fig. 3 Installation

L1 + L2 ≤ 140 m / 459 ft. ⇒ 5 = XY2CZ601
L1 + L2 ≥ 140 m (...200 m Max.) / 499 ft. (...656 ft. Max.) ⇒ 5 = XY2CZ708 + XY2CZ705

4.0 ± 0.5 N.m
2.95 ± 0.369 lb.ft

XY2CZ524 → 1.5 ± 0.1 N.m
1.1 ± 0.074 lb.ft

3 = XY2CZ10
4 = XY2CZ712

0.15 ± 0.05 m
5.9 ± 1.96 in.

L1 + L2

70...200 m / 230...656 ft. Max.

L2

0.15 ± 0.05 m
5.9 ± 1.96 in.
**Fig. 5**

Setting with the cable tensioner

**Fig. 5A**

**Fig. 5B**

**Example**

<table>
<thead>
<tr>
<th>D = 3 m / 9.84 ft</th>
<th>2 x L (m / ft)</th>
<th>F1 (N)</th>
<th>f (mm / in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 70</td>
<td>2 x 230</td>
<td>176</td>
<td>290 / 11.42</td>
</tr>
<tr>
<td>2 x 100</td>
<td>2 x 328</td>
<td>190</td>
<td>300 / 11.81</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 5 m / 16.4 ft</th>
<th>2 x L (m / ft)</th>
<th>F1 (N)</th>
<th>f (mm / in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 70</td>
<td>2 x 230</td>
<td>125</td>
<td>370 / 14.57</td>
</tr>
<tr>
<td>2 x 100</td>
<td>2 x 328</td>
<td>126</td>
<td>385 / 15.16</td>
</tr>
</tbody>
</table>

**Fig. 6**

**Setting with the cable tensioner**

1. **Fig. 6A**
   - Adjust the tensioner.
   - Ensure proper cable tension.
   - Min: 3
   - 10 N m (88.5 lb-in)
Fig. 6B

Fig. 6C

Fig. 6D

Fig. 6E

Fig. 7

Fig. 7A

Fig. 7B

Fig. 7C

Setting point

Operating zone

Forbidden zone

F = 0
F = 300N

31 mm
1.22 in.

39.5 mm
1.56 in.

54 mm
2.13 in.

85 mm
3.35 in.
**Fig. 8**

Click!

**Fig. 9**

1,5 ± 0,1 Nm
(13,3 ± 0,9 lb-in)

**Fig. 10**

**Fig. 11**

2,2 Nm±0,2 / 19,5 lb-in±1,8

**Fig. 12**

XY2CED...H7

- min: 1 x 0,5 mm² (AWG 20)
- max: 2 x 1,5 mm² (AWG16)

- 8 ± 1 mm
  - 0.315 ± 0.04 in.

- 1 Nm ± 0,2 (8.9 ± 1,8 lb-in)

- Ø 3,5 mm Maxi
  - Ø 0.14 in. Maxi

**Fig. 13**

N°1 Phillips®

ZALVBM

ZALVBM
EMERGENCY STOP ROPE PULL SWITCHES

Mechanical endurance : 60000 operating cycles

RISK OF PHYSICAL INJURY

\* Inspect the cable in its entirety to identify the reason for the emergency stop order before restarting.
\* Use only Telemecanique Sensors accessories and Telemecanique Sensors Ø 5mm cable.
\* Mount the product to its support using 4 screws.
\* Mount the product in compliance with the centering constraints mentioned in fig.1
\* Use only NC contacts for the emergency stop safety function
\* The use of 2 end springs XY2CEDC2 is mandatory.
\* Place the cable guides or pulleys no less than 3 meters (9.84 ft) and no more than 5 meters (16.4 ft) apart from each other.
\* Remove all objects placed on or masking the cable.
\* Ensure that the cable is free to move.
\* Ensure that the product is accessible along the entire traction zone.
\* Check that none of the device components is deformed by an electrical on-off cycle once the cover is closed.
\* Check that the cover is securely closed.
\* Check that the device, cable and accessories are securely mounted in place.
\* Check the product installation, setting and functioning based on the information provided in this instruction manual.
\* Check the proper working of the XY2CEDC, cables and accessories after installation and after any work is done on the installation.

Failure to follow these instructions will result in death or serious injury.

DANGER

RISK OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH

\* Before any intervention, switch off the power supply of the device acting as the support.
\* Before any work is done, switch off the power supply of the device.
\* Take care not to damage the parts of the support that are normally powered.
\* Visually inspect the good condition of the product.
\* Use appropriate personal protective equipment (PPE) and follow the recommended instructions for electrical environments. (see NFPA 70E).
\* Always use an appropriate electrical measuring device to confirm that the entire installation is powered down.
\* Use an IP66 cable gland.
\* Protect the installation against power surges.

Failure to follow these instructions will result in death or serious injury.

WARNING

RISK OF PHYSICAL INJURY

\* Secure the cable traction zone.
\* Do not pull on the cable while adjusting cable tightness.
\* Check the tightness of parts such as bellows, gaskets, push button, pilot light, etc.
\* Ensure that the product is anchored along the same axis as the cable.
\* Configure the device based on the ambient temperature.
\* Ensure that the reset button zone remains accessible.
\* Remove the button before dismantling the XY2CEDC.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Installation constraints

The installation must be feasible and rectilinear.

The entire cable length must be visible from the emergency stop device (ISO 13850).

The maximum length of the installation must not exceed 200 m (656 ft) (fig.1).

The maximum length of the installation must exceed 70 m (230 ft) (fig.1).

\* The 10% x L1 + L2 maximum product L must not exceed: \* Lmax =10% x L + \* 2

NOTE: Emergency stop rope pull switches with silicone bellows and booted reset push button (XY2CEDC2...) are designed for switching in a maximum operating temperature range of -40°C to 70°C (-40°F to 158°F). The emergency stop rope pull switch is only one component of the entire installation, the proper operation of the overall equipment must be checked regularly (see maintenance section). In case of particularly harsh environmental conditions, additional protection devices shall be implemented.

The installation must be performed with an ambient temperature corresponding to the average of the operating temperature range.

The maximum cable length must be compatible with acceptable temperature differences (fig.2).

Depending on the length of the installation, use the following equipment for guiding the cable:

- 2 x L = 140 m (459...656 ft) – Rings XY2CZ701 (pulleys XY2CZ708... also possible)
- 2 x L = 140...200 m (459...656 ft) – Pulleys XY2CZ618 (mandatory)

Installation (fig. 3)

1. Mount the device \( \mathcal{O} \) to a rigid support using 4 M6 cylindrical head screws through holes \( \mathcal{O} \) (tightening torque = 4±0.5 Nm / 3.49±0.37 lb.ft).
2. Securely fasten the cable guides \( \mathcal{O} \) to rigid elements in compliance with the specified distance.
3. Attach the end springs \( \mathcal{O} \) and \( \mathcal{O} \) to a rigid element.
4. Remove the cover from the device \( \mathcal{O} \) using unscrewing the 6 screws \( \mathcal{O} \) (fig.4).
5. Maintain the cam \( \mathcal{O} \) centered relative to the actuator \( \mathcal{O} \) thanks to the adjusting shim \( \mathcal{O} \) (fig.4).
6. Connect the cables \( \mathcal{O} \) and \( \mathcal{O} \) to the end springs \( \mathcal{O} \) and \( \mathcal{O} \) using a cable clamp \( \mathcal{O} \).
7. Pass the cables \( \mathcal{O} \) and \( \mathcal{O} \) through all the cable guides \( \mathcal{O} \).
8. Connect the cables \( \mathcal{O} \) and \( \mathcal{O} \) to the product \( \mathcal{O} \).

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel.

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