Accessories for rope safety switches, FAST line
Introduction

Pizzato Elettrica has designed and patented new accessories to install the rope of safety switches faster and to obtain an aesthetically more pleasant system.

The new accessories, in comparison with the traditional fixing system through carpentry material, have the following advantages:

- The installation is faster because only one screw is used for the fastening of every rope extremity, and the parts are prepared to ease the installation. Some practical tests have pointed out that the installation time is halved, reason for which it is named FAST.
- The system is aesthetically pleasant, because thread parts (which sometimes tear operators’ dresses) and the rope extremities, usually fixed by heat-shrinkable sheath or adhesive tape, have been hidden.
- The red plastic covers of the fixing parts have been developed also for the function of controlling the rope clamping. If the rope fastening screw is not fixed tightly enough, the cover cannot pass.
- The rope is fixed without folds, thus reducing the rope stabilisation time and the possible re-calibrations of the rope tightening. The system has been tested for correct function only if used with steel ropes of high quality like the ones Pizzato Elettrica usually supplies.

Combinations examples

This combination of accessories is suitable for medium rope lengths, where the two rope ends are far away from each other.

This combination of accessories is suitable for medium-high rope lengths (thanks to VF AF-ME78 safety spring) and where the two rope ends are far away from each other.

This combination of accessories is suitable for medium rope lengths or where the two rope ends are close to each other.

For further information, please see the general catalog 2005-2006.
On the web site www.pizzato.com you can free download a demonstrative video.
Sometimes it is useful to have a visible local signal to identify when or which rope switch has been actuated. The Pizzato Elettrica signal lamps have been created for this requirement, and they have been designed to be directly fixed on the threaded entries of the switches. These light indicators are sturdy, have IP67 protection degree and accept any BA9 electric bulb connection with power up to 3 W. The lamps are divisible into two parts for substitution of the electric bulb without removing the lamp holder, and their internal part can rotate without the risk of kinking the cables. Three different semitransparent colour covers are available. The possibility to have rope switches with 3 pole contacts allows the making of circuits where each switch has two NC contacts with positive opening for the safety chain, and one NO contact for the light indicator.

Safety springs

Some rope safety switch applications require ropes with particularly long rope lengths. With day/night changes of temperature, the ropes are lengthened or shortened in proportion to the rope length, to the change of temperature and to the coefficient of expansion of the steel. The changes of the rope length do not have linear repercussions on the switch, because the very long ropes are regularly sustained by supports that modify the linearity of the system. As the safety switches have to be installed stretching the rope inside the working area of the switch, it is possible that for particularly long ropes or particularly high changes of temperature there will be the unwanted activation of the switch. To reduce the effect of the changes of the temperature, it is possible to install a safety spring at the opposite extremity of the switch, so the rope elongation is equally divided between the two devices. The safety spring has been made to have an elastic coefficient equal to the spring inside the switch. The safety spring has also a stop ring that, in case of emergency actuation, let the rope traction to work only on the switch.

Light indicators

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Safety Modules

The rope safety switches and the mushroom-head push buttons inserted in the emergency chains can be connected with the Pizzato Elettrica safety modules in order to obtain safety circuits up to category 4 in accordance with EN 954-1. Safety modules with instantaneous and delayed contacts are available for the realization of emergency circuits type 0 (immediate stop) or type 1 (monitored stop).
Application examples

Conveyor
Moving stairs
Benders
Complete perimeter protection
Lift compartment
Long bay machinery
Machinery that require both hands
Emergency stop along the frontal section of the machine.

Application example: possibility of emergency stop along the whole perimeter of the machine. Rope supported by angular pulleys.

Angular pulley
Article: VF AF-CA10

Stay bolt
Article: VF AF-TR8

Safety module
Example: CSAR-20/024

Function indicator
Article: VF AF-IF1GR03

End clamp
Article: VF AF-MR5

Rope safety switches
Article: FL 18B3

Light indicator
Article: VF ILL024GP

For the choice of the safety module suitable for the application, consult the general catalog.
Application example: possibility of emergency stop along the frontal section of the machine.

Rope safety switches
Article: FD 1878

Adjustable stay bolt
Article: VF AF-TR5

Function indicator
Article: VF AF-IF1GR03

End clamp
Article: VF AF-MR5

Safety spring
Article: VF AF-ME78

Application example: possibility of emergency stop along the whole frontal section of the machine (long bays). Rope supported by pulleys.

Rope safety switches
Article: FD 1884

Adjustable stay bolt
Article: VF AF-TR5

Pulley
Article: VF AF-CA5

Function indicator
Article: VF AF-IF1GR03

End clamp
Article: VF AF-MR5

Rope safety switches
Article: FD 1883

Any information or application example, included the connection diagrams, described in this document are to be intended as purely descriptive. The choice and application of the products in conformity with the Standards, in order to avoid damages to persons or goods, is under the responsibility of the user.
Accessories for rope safety switches, FAST line

Rope installation accessories, FAST line

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>1 pc pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF AF-TR5</td>
<td>Adjustable stay bolt</td>
<td></td>
</tr>
<tr>
<td>VF AF-MR5</td>
<td>End clamp</td>
<td></td>
</tr>
<tr>
<td>VF AF-TR8</td>
<td>Stay bolt</td>
<td></td>
</tr>
</tbody>
</table>

Pulleys

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>1 pc pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF AF-CA5</td>
<td>Pulley</td>
<td></td>
</tr>
<tr>
<td>VF AF-CA10</td>
<td>Angular pulley</td>
<td></td>
</tr>
</tbody>
</table>

Safety spring

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>1 pc pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF AF-ME78</td>
<td>Safety spring</td>
<td></td>
</tr>
<tr>
<td>VF AF-ME80</td>
<td>Safety spring</td>
<td></td>
</tr>
</tbody>
</table>

For longitudinal heads only. Example FD 1878

For transversal heads only. Example FD 1883

Light indicator

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>1 pc pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF IL024GP</td>
<td>Yellow, 24 VAC/DC</td>
<td></td>
</tr>
<tr>
<td>VF IL024RP</td>
<td>Red, 24 VAC/DC</td>
<td></td>
</tr>
<tr>
<td>VF IL024VP</td>
<td>Green, 24 VAC/DC</td>
<td></td>
</tr>
<tr>
<td>VF ILX000GP</td>
<td>Yellow, without lamp</td>
<td></td>
</tr>
<tr>
<td>VF ILX000RP</td>
<td>Red, without lamp</td>
<td></td>
</tr>
<tr>
<td>VF ILX000VP</td>
<td>Green, without lamp</td>
<td></td>
</tr>
</tbody>
</table>

These light indicators are used for visualizing a change of the state of an electric contact inside the switch. They can be installed on switches by screwing them on one of the conduit entries not used for electric cables. Protection degree IP67

Items with code on the green background are available in stock

Function indicator

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>1 pc pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF AF-IF1GR01</td>
<td>text &quot;STOP EMERGENZA&quot;</td>
<td></td>
</tr>
<tr>
<td>VF AF-IF1GR02</td>
<td>text &quot;EMERGENCY STOP&quot;</td>
<td></td>
</tr>
<tr>
<td>VF AF-IF1GR03</td>
<td>text &quot;STOP&quot;</td>
<td></td>
</tr>
<tr>
<td>VF AF-IF1GR04</td>
<td>text &quot;NOT - AUS&quot;</td>
<td></td>
</tr>
<tr>
<td>VF AF-IF1GR05</td>
<td>text &quot;ARRET D’URGENCE&quot;</td>
<td></td>
</tr>
<tr>
<td>VF AF-IF1GR06</td>
<td>text &quot;PARADA DE EMERGENCIA&quot;</td>
<td></td>
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</tbody>
</table>

Rope function indicators recommended in accordance with the standard EN 418, par. 4.5.1 and 4.4.3. (Patent pending).
Rope and other accessories

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF F05-100</td>
<td>100 m rope</td>
<td>5.1</td>
</tr>
<tr>
<td>VF F05-035</td>
<td>35 m rope</td>
<td>1.8</td>
</tr>
<tr>
<td>VF F05-020</td>
<td>20 m rope</td>
<td>1.0</td>
</tr>
<tr>
<td>VF F05-010</td>
<td>10 m rope</td>
<td>0.5</td>
</tr>
<tr>
<td>Ø 5 mm zinc-plated steel rope roll, coated with red plastic material.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 pc pack

VF F05-400 | Rope | 400 m board roll, zinc-plated steel rope Ø 5 mm, coated with red plastic material. Weight 20.5 Kg. |

VF F05-500B | Rope | 500 m board roll, zinc-plated steel rope Ø 5 mm, coated with white plastic material. Weight 25.6 Kg. |

Rope installation accessories kits, FAST line

1 pc pack

VF F05-035 | 35 m rope | Ø 3 m zinc-plated steel rope roll, coated with red plastic material. |

Coating | Zinc-plated steel | Ø 3 m |

The rope has been selected for long-term resistance against negligence and atmospheric agents.

Article Description Weight (Kg)
VF F05-100 Rope 5.1
VF F05-035 Rope 1.8
VF F05-020 Rope 1.0
VF F05-010 Rope 0.5
Ø 5 mm zinc-plated steel rope roll, coated with red plastic material.

VF F05-400 Rope 400 m board roll, zinc-plated steel rope Ø 5 mm, coated with red plastic material. Weight 20.5 Kg.

VF F05-500B Rope 500 m board roll, zinc-plated steel rope Ø 5 mm, coated with white plastic material. Weight 25.6 Kg.

Rope installation accessories kits, FAST line

Practical installation kits containing stay bolts and rope in the same pack.

<table>
<thead>
<tr>
<th>Article</th>
<th>Kit content</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF AF-KT10M0</td>
<td>1x VF AF TR5, 1x VF AF-MR5, 1x VF F05-010</td>
</tr>
<tr>
<td>VF AF-KT20M0</td>
<td>1x VF AF TR5, 1x VF AF-MR5, 1x VF F05-020</td>
</tr>
<tr>
<td>VF AF-KT35M0</td>
<td>1x VF AF TR5, 1x VF AF-MR5, 1x VF F05-035</td>
</tr>
</tbody>
</table>

Support stand for board roll, it makes the uncoiling easy and practical without kinking the rope. Provided with a handle, it allows an easy transport of the coil without damage.

Article Description
VF F05-100 Rope 10 m
VF F05-035 Rope 20 m
VF F05-020 Rope 35 m

VF F05-400 Rope 400 m board roll, zinc-plated steel rope Ø 5 mm, coated with red plastic material. Weight 20.5 Kg.

VF F05-500B Rope 500 m board roll, zinc-plated steel rope Ø 5 mm, coated with white plastic material. Weight 25.6 Kg.

VF F05-035 Rope Ø 3 m zinc-plated steel rope roll, coated with red plastic material.

VF F05-400 Rope 400 m board roll, zinc-plated steel rope Ø 5 mm, coated with red plastic material. Weight 20.5 Kg.

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