

# 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 tage, 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.



Rope fixing by only one screw. (Driving torque 5 Nm min.)



Parts designed to ease the installation



Plastic covers with the function of control and aesthetic

#### **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.

# Tensioning point

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.

#### **Function indicator for rope**

These function indicators help in the visualization of the rope and its emergency function highlighting its presence as recommended by the standard EN 418 chap. 4.5.1.

They are fixed on the rope through screws and thanks to their handle-shape make the operation easier. The indicators can be supplied with different texts in several languages.



#### Pulleys for rope



The pulleys are used in applications where the rope is too long, to support its length or bend its route. Two sturdy pulleys designed to avoid the deformation and allow the rope to remain in its seat also when it's activated energetically, have been made.

The angular pulley has been designed with a particular shape and with a slotted fixing hole to make the installation easier and to maintain the rope to a correct distance from guards edges.

#### 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



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 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).



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#### Application examples



Conveyor



Lift compartment



Moving stairs



Long bay machinery



Benders



Machinery that require both hands



Complete perimeter protection



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.



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Application example: possibility of emergency stop along the frontal section of the machine.



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.



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.

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Pulleys			1 pc pack
Article	Description	Article	Description
VF AF-CA5	Pulley	VF AF-CA10	Angular pulley
		Ce	

#### Safety spring

<b>U</b>	arecy spring			- poloit
	Article	Description	Article	Description
Ē	VF AF-ME78	Safety spring	VF AF-ME80	Safety spring

For longitudinal heads only. Example FD 1878

#### **Light indicator**

ht indicator	<b>1 pc</b> pack		
A I			
Article	Description		
VF ILI024GP	Yellow, 24 VAC/DC		
VF ILI024RP	Red, 24 VAC/DC		
VF ILI024VP	Green, 24 VAC/DC		
VF ILX000GP	Yellow, without lamp		
VF ILX000RP	Red, without lamp		
VF ILX000VP	Green, without lamp		



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

For transversal heads only. Example FD 1883

Function indicato	r 1 pc pack		
A	Description		
Article	Description		
VF AF-IF1GR01	text "STOP EMERGENZA"		
VF AF-IF1GR02	text "EMERGENCY STOP"		
VF AF-IF1GR03	text "STOP"		
VF AF-IF1GR04	text "NOT - AUS"		
VF AF-IF1GR05	text "ARRET D'URGENCE"		
VF AF-IF1GR06	text "PARADA DE EMERGENCIA"		
STOP	Rope function indicators recommended in accordance with the standard EN 418, par. 4.5.1 and 4.4.3. (Patent pending).		

Items with code on the green background are available in stock

1 pc pack



#### Rope installation accessories kits, FAST line

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

	Article	Kit content	
$\hat{i}$	VF AF-KT10M0	1x VF AF TR5 1x VF AF-MR5 1x VF F05-010	<b>~</b> 10 m
	VF AF-KT20M0	1x VF AF-TR5 1x VF AF-MR5 1x VF F05-020	20 m
	VF AF-KT35M0	1x VF AF-TR5 1x VF AF-MR5 1x VF F05-035	35 m
	Article	Kit content	
	VF AF-KM10R0	1x VF AF-MR5 1x VF AF-TR8 1x VF F05-010	0 m m
	VF AF-KM20R0	1x VF AF-MR5 1x VF AF-TR8 1x VF F05-020	20 m
	VF AF-KM35R0	1x VF AF-MR5 1x VF AF-TR8 1x VF F05-035	G
	Article	Kit content	
	VF AF-KT10M7	1x VF AF-TR5 1x VF AF-MR5 1x VF F05-010 1x VF AF-ME78	The For longitudinal heads 78-79 only
	VF AF-KT20M8	1x VF AF-TR5 1x VF AF-MR5 1x VF F05-020 1x VF AF-ME80	Image: Contract of the second seco
	VF AF-KT35M8	1x VF AF-TR5 1x VF AF-MR5 1x VF F05-035 1x VF AF-ME80	For transversal heads 80-83-84 only

Items with code on the green background are available in stock

1 pc pack





production program

general catalog

2005/2006





ATEX brochure





cd-rom 2006



web site www.pizzato.com



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safety modules brochure

