Signalling switches



Main features

- Technopolymer housing, from one to two conduit entries
- Protection degree IP67
- Versions with assembled M12 connector
- Compliant with EN 81

Quality marks:



IMQ approval: EG610 E131787 UL approval:

CCC approval: 2007010305230013 EAC approval: RU C-IT.YT03.B.00035/19

Technical data

Housing made of glass fibre reinforced technopolymer, self-extinguishing, shock-proof

and with double insulation:

FR series, one conduit entry: M20x1.5 (standard) FX series, two knock-out threaded conduit entries: M20x1.5 (standard)

IP67 with cable gland of equal or Protection degree acc. to EN 60529:

higher protection degree

General data

Ambient temperature: -25°C ... +80°C Version for operation at ambient temperatures from -40°C ... +80°C on request

Max. operating frequency: 3600 operating cycles/hour Mechanical endurance: 1 million operating cycles

Mounting position: any

Tightening torques for installation: see page 141

Wire cross-sections and

wire stripping lengths: see page 153

Electrical endurance

Load type: 20 single-tube neon lamps 36 W / 230 V (connected in parallel) Frequency: 10 s ON / 10 s OFF

100.000 Maximum number of cycles:

In compliance with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60947-1, EN 50047, IEC 60204-1, EN 60204-1, EN ISO 14119, EN ISO 12100, IEC 60529, EN 60529, EN IEC 63000, EN 81-20, EN 81-50, UL 508, CSA 22.2 No.14.

Approvals:

IEC 60947-5-1, UL 508, CSA 22.2 No.14, GB/T14048.5-2017.

Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, Lift Directive 2014/33/EU, RoHS Directive 2011/65/EU.

riangle If not expressly indicated in this chapter, for correct installation and utilization of all articles see the instructions given on pages 139 to 146.

Electrical data		Utilizatio	n catego	ory	
Thermal current (I _{th}): Rated insulation voltage (U _i):	10 A 500 Vac 600 Vdc 400 Vac 500 Vdc (contact blocks 11, 12)	Alternatino U _e (V) I _e (A)	g current 250 6	t: AC15 (5) 400 4	0÷60 Hz) 500
Rated impulse withstand voltage (U _{imp}): Conditional short circuit current: Protection against short circuits: Pollution degree:	6 kV 1000 A acc. to EN 60947-5-1 type aM fuse 10 A 500 V 3	Direct curi U _e (V) I _e (A)	-	13 125 0.55	250 0.3

Features approved by IMQ

Rated insulation voltage (U_i):

Conventional free air thermal current (I_{th}): Protection against short circuits: Rated impulse withstand voltage (U,) Protection degree of the housing: MV terminals (screw terminals) Pollution degree: Utilization category:

6 kV IP67 AC15 Operating voltage (U_e): 400 Vac (50 Hz) Operating current (I_): Forms of the contact element: Zb, Y+Y, X+X In compliance with standards: EN 60947-1, EN 60947-5-1, fundamental

requirements of the Low Voltage Directive 2014/35/EU

Please contact our technical department for the list of approved products.

500 Vac

10 A

400 Vac (for contact blocks 11, 12)

type aM fuse 10 A 500 V

Features approved by UL

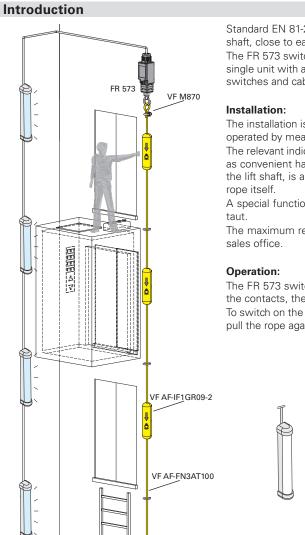
Q300 pilot duty (69 VA, 125-250 V dc) **Electrical Ratings:** A600 pilot duty (720 VA, 120-600 V ac)

Environmental Ratings: Types 1, 4X, 12, 13

For all contact blocks use 60 or 75°C copper (Cu) conductors, rigid or flexible, wire size 12, 14 AWG. Tightening torque for terminal screws of 7.1 lb in (0.8 Nm).

The hub is to be connected to the conduit before the hub is connected to the enclosure.

Please contact our technical department for the list of approved products.



Standard EN 81-20, paragraph 5.2.1.5, details the requirement for switches to illuminate the lift shaft, close to each access point, and in machinery spaces.

The FR 573 switch has been designed specifically to operate the lights in the lift shaft, and, as a single unit with a single cabling, allows this requirement to be met without having to install light switches and cabling separately on each floor.

The installation is extremely simple: the switch is fixed in the upper part of the lift shaft and it is operated by means of a rope that runs through the entire shaft.

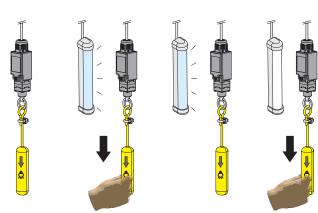
The relevant indicators of the rope's function – placed at regular intervals on each floor – also act as convenient handles. In this way, an operator on the cabin roof, or at any position throughout the lift shaft, is able to actuate the switch by simply pulling the practical indicator device, or the rope itself.

A special function indicator with weights is installed at the end of the rope, in order to keep it taut.

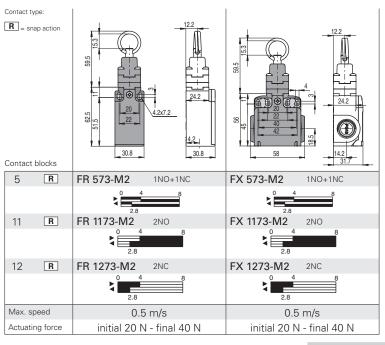
The maximum recommended rope length is 50 metres. For longer lengths, please contact our sales office.

The FR 573 switch retains its position after actuation. This means that the first actuation closes the contacts, the next actuation opens them, and so on.

To switch on the light in the lift shaft it is sufficient to pull the rope. To switch the light off, simply pull the rope again.



Dimensional drawings



VF AF-IF1GR09-2P

Accessories		
Article	Description	
VF AF-IF1GR09-2P	End indicator with internal stabilising weight	
VF AF-IF1GR09-2	Intermediate rope function indicators	
	Rope function indicator. Tightening torque of fastening screws: 0.8 1.0 Nm.	
Article	Description	
VF AF-FN3AT100	100 m rope	
	Yellow/transparent rope coil, Ø 3 mm with brass-plated steel core and PVC coating.	
Article	Description	
VF M870	Rope end clamp	
	9.5 10.5	

All values in the drawings are in mm

Accessories See page 135

The 2D and 3D files are available at www.pizzato.com

Signalling switches



Main features

- Technopolymer housing, from one to two conduit entries
- Protection degree IP67
- Versions with assembled M12 connector
- Versions with gold-plated silver contacts

Quality marks:



IMQ approval: EG610 E131787 UL approval:

CCC approval: 2007010305230013 EAC approval: RU C-IT.YT03.B.00035/19

Technical data

Housing

Housing made of glass fibre reinforced technopolymer, self-extinguishing, shock-proof

and with double insulation:

FR series, one conduit entry: M20x1.5 (standard) FX series, two knock-out threaded conduit entries: M20x1.5 (standard)

Protection degree:

IP67 acc. to EN 60529 with cable gland of equal or higher protection

degree

General data

-25°C ... +80°C Ambient temperature: Version for operation at ambient temperatures from -40°C ... +80°C on request

Max. operating frequency: 3600 operating cycles/hour Mechanical endurance: 20 million operating cycles

Mounting position:

Tightening torques for installation: see page 141

Wire cross-sections and

wire stripping lengths: see page 153

In compliance with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60947-1, EN 50047, IEC 60204-1, EN 60204-1, EN ISO 14119, EN ISO 12100, IEC 60529, EN 60529, EN IEC 63000, EN 81-20, EN 81-50, UL 508, CSA 22.2 No.14.

Approvals:

IEC 60947-5-1, UL 508, CSA 22.2 No.14, GB/T14048.5-2017.

Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, Lift Directive 2014/33/EU, RoHS Directive 2011/65/EU.

riangle If not expressly indicated in this chapter, for correct installation and utilization of all articles see the instructions given on pages 139 to 146.

Electrical data		Utilization category			
Thermal current (I _{th}):	10 A	Alternati	ng curren	t: AC15 (5	0÷60 Hz)
Rated insulation voltage (U):	500 Vac 600 Vdc	U (V)	250	400	500
Rated impulse withstand voltage (U _{imp}):	6 kV	l _e (A)	6	4	1
Conditional short circuit current:	1000 A acc. to EN 60947-5-1		ırrent: DC	13	
Protection against short circuits:	type aM fuse 10 A 500 V	U_ (V)	24	125	250
Pollution degree:	3	l _e (A)	3	0.55	0.3

Features approved by IMQ

Rated insulation voltage (U_i): Conventional free air thermal current (Ith): Protection against short circuits: Rated impulse withstand voltage (U Protection degree of the housing: MV terminals (screw terminals) Pollution degree:

IP67 Utilization category AC15 Operating voltage (U_e): 400 Vac (50 Hz) Operating current (I_): 3 A Forms of the contact element: Zb, Y+Y

In compliance with standards: EN 60947-1, EN 60947-5-1, fundamental requirements of the Low Voltage Directive 2014/35/EU

500 Vac

type aM fuse 10 A 500 V

10 A

6 kV

Please contact our technical department for the list of approved products.

Features approved by UL

Electrical Ratings: Q300 pilot duty (69 VA, 125-250 V dc) A600 pilot duty (720 VA, 120-600 V ac)

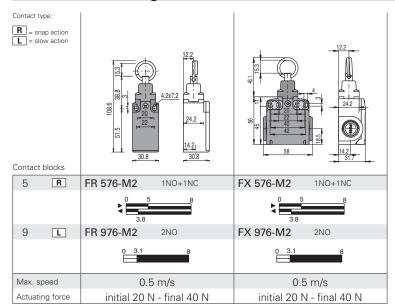
Environmental Ratings: Types 1, 4X, 12, 13

For all contact blocks use 60 or 75°C copper (Cu) conductors, rigid or flexible, wire size 12, 14 AWG. Tightening torque for terminal screws of 7.1 lb in (0.8 Nm).

The hub is to be connected to the conduit before the hub is connected to the enclosure.

Please contact our technical department for the list of approved products.

Dimensional drawings



Accessories		
Article	Description	
VF AF-IF1GR09-2P	End indicator with internal stabilising weight	
VF AF-IF1GR09-2	Intermediate rope function indicators	
	Rope function indicator.	
	Tightening torque of fastening screws: 0.8 1.0 Nm	

Article	Description
VF AF-FN3AT100	100 m rope
	Yellow/transparent rope coil, Ø 3 mm with brass-plated steel core and PVC coating.

