

## Main data

- Polymer housing with positive opening $\Theta$
- Protection degree IP20 (terminals), IP40 (contacts)
- 11 contact blocks available
- Actuator with plastic or metal push button
- Suitable for foot switches PA, PX series


## Markings and quality marks:



## Technical data

## Housing

Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin
Protection degree: IP20 (terminals), IP40 (contacts) according to EN 60529

## General data

Ambient temperature: from $-25^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$
Version for operation in ambient temperature from $-40^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ on request
Max actuation frequency: 3600 operations cycles ${ }^{1} /$ hour
Mechanical endurance: 20 million operations cycles ${ }^{1}$
Maximum actuation speed:
Minimum actuation speed:
Driving torque for installation:

## $0,5 \mathrm{~m} / \mathrm{s}$

$1 \mathrm{~mm} / \mathrm{s}$ (slow action)
$0,01 \mathrm{~mm} / \mathrm{s}$ (snap action)
see pages 7/1-7/12
(1) One operation cycle means two movements, one to close and one to open contacts, as foreseen by EN 60947-5-1 standard.

Cross section of the conductors (flexible copper wire))
Contact blocks $5,6,7,9,10,11,12,13,14,15,18,37,66,67$ : min. $1 \times 0,5 \mathrm{~mm}^{2}(1 \times$ AWG 20) max. $2 \times 2,5 \mathrm{~mm}^{2} \quad(2 \times$ AWG 14))

## In conformity with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60947-1, IEC 60204-1, EN 60204-1, EN 1088, EN ISO 12100-1, EN ISO 12100-2, IEC 60529, EN 60529, NFC 63-140, VDE 0660-200, VDE 0113,
Approvals:
UL 508

In conformity with requirements requested by:
Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and Electromagnetic Compatibility 2004/108/EC.
Positive contact opening in conformity with standards:
IEC 60947-5-1, EN 60947-5-1, VDE 0660-206.

Installation for safety applications:
Use only switches marked with the symbol $\Theta$. The safety circuit must always be connected with the NC contacts (normally closed contacts: 11-12, 21-22 or 31-32) as stated in the standard EN 60947-5-1, encl. K, par. 2. The switch must be actuated with at least up to the positive opening travel shown in the travels diagrams. The switch must be actuated at least with the positive opening force, shown in brackets, underneath each article, near the value of the min. force.
§ If not expressly indicated in this chapter, for the right installation and the correct utilization of all articles see requirements indicated from page $\mathbf{7 / 1}$ to page 7/12.

| Electrical data | Utiliza | cate |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Thermal current (lth): $10 \mathrm{~A}$ | Alternate current: AC15 (50 $\div 60 \mathrm{~Hz}$ ) |  |  |  |
| Rated insulation voltage (UI): $\quad 500 \mathrm{Vac} 600 \mathrm{Vdc}$ | Ue (V) | 250 | 400 | 500 |
| Rated impulse withstand voltage ( $\mathrm{U}_{\text {imp }}$ ): 6 kV | le (A) | 6 | 4 | 1 |
| Conditional shot circuit current: 1000 A according to EN 60947-5-1 | Direct current: DC13 |  |  |  |
| Protection against short circuits: fuse 10 A 500 V type aM | $\mathrm{Ue}(\mathrm{V})$ | 24 | 125 | 250 |
| Pollution degree: 3 | le (A) | 6 | 1,1 | 0,4 |

## Data type approved by UL

Utilization categories 0300 ( 69 VA, $125-250 \mathrm{Vdc}$ )
A600 (720 VA, $120-600 \mathrm{Vac})$
Data of the housing type 1, 4X "indoor use only", 12, 13
For all contact blocks use 60 or $75^{\circ} \mathrm{C}$ copper ( Cu ) conductor and wire
size No. 12-14 AWG. Terminal tightening torque of $7,1 \mathrm{lb}$ in ( 0.8 Nm ).
In conformity with standard: UL 508

Dimensional drawings

|  | Polymer push button | Metal push button |  |
| :---: | :---: | :---: | :---: |
| Contacts type: <br> Contact blocks |  |  | Travel diagrams |
| 5 R | VF B501 $\quad$ 1NO 1 1NC | VF B502 $\quad$ 1NO+1NC |  |
| 6 L | VF B601 $\quad$ 1 ${ }^{\text {NO }}+1 \mathrm{NC}$ | VF B602 $\quad$ 1NO+1NC |  |
| 7 L0 | VF B701 $\quad$ - $1 \mathrm{NO}+1 \mathrm{NC}$ | VF B702 $\quad$ 1 ${ }^{\text {a }}+1 \mathrm{NC}$ | $\stackrel{\text { 0 }}{0}$ |
| $9 \square$ | VF B901 $\quad$ 2NC | VF B902 $\quad$ 2NC | $\stackrel{2.9}{\square}$ |
| 10 L | VF B1001 2NO | VF B1002 2NO |  |
| 11 R | VF B1101 $\Theta$ 2NC | VF B1102 $\Theta$ 2NC |  |
| 12 R | VF B1201 2NO | VF B1202 2NO |  |
| 13 LV | VF B1301 $\Theta$ 2NC | VF B1302 $\Theta$ 2NC |  |
| 14 LS | VF B1401 $\Theta$ 2NC | VF B1402 $\Theta$ 2NC | $0_{0}^{\frac{1.4 \Theta 2.9}{3 \ominus 4.5}} \frac{3}{3 \ominus}$ |
| 15 LS | VF B1501 2NO | VF B1502 2NO | $\begin{aligned} & 0 \\ & \hline 1.4 \\ & \hline{ }_{3} \end{aligned}$ |
| 18 LA | VF B1801 $\Theta 1 \mathrm{NO}+1 \mathrm{NC}$ | VF B1802 $\Theta 1 \mathrm{NO}+1 \mathrm{NC}$ |  |
| 37 L | VF B3701 $\Theta 1 \mathrm{NO}+1 \mathrm{NC}$ | VF B3702 $\Theta$ 1NO+1NC | $\begin{aligned} & 0.4 \quad \Theta 4.96 \\ & \hline \quad 0 \quad 1.5 \end{aligned}$ |
| 66 L | VF B6601 $\Theta$ 1NC | VF B6602 $\Theta$ 1NC |  |
| 67 L | VF B6701 1NO | VF B6702 1NO | $\stackrel{0}{0}$ |
| Max speed | 0,5 m/s | 0,5 m/s |  |
| Min. force | $8 \mathrm{~N}(20 \mathrm{~N} \Theta)$ | $8 \mathrm{~N}(20 \mathrm{~N} \Theta)$ |  |

## Legend

## Code structure

|  |  |
| :--- | :--- |
|  |  |
| Contact blocks |  |
| $\mathbf{5}$ | 1NO+1NC, snap action |
| $\mathbf{6}$ | 1NO+1NC, slow action |
| $\mathbf{7}$ | 1NO+1NC, slow action overlapped |
| $\mathbf{9}$ | 2NC, slow action |
| $\mathbf{1 0}$ | 2NO, slow action |
| $\mathbf{1 1}$ | 2NC, snap action |
| $\mathbf{1 2}$ | 2NO, snap action |
| $\mathbf{1 3}$ | 2NC, slow action shifted and spaced |
| $\mathbf{1 4}$ | 2NC, slow action shifted |
| $\mathbf{1 5}$ | 2NO, slow action shifted |
| $\mathbf{1 8}$ | 1NO+1NC, slow action closer |
| $\mathbf{3 7}$ | 1NO+1NC, snap action |
| $\mathbf{6 6}$ | 1NC, snap action |
| $\mathbf{6 7}$ | 1NO, snap action |

article options

Releasing the switch

## VF B501-G

## block

- $1 \mathrm{NO}+1 \mathrm{NC}$, slow action

7 1NO+1NC, slow action overlapped
9 2NC, slow action
10 2NO, slow action
11 2NC, snap action
2NO, snap action
13 2NC, slow action shifted and spaced
2NC, slow action shifted
15 2NO, slow action shifted
$181 \mathrm{NO}+1 \mathrm{NC}$, slow action closer
$371 N O+1 N C$, snap action
66 1NC, snap action
67 1NO, snap action

## Contacts type

silver contacts (standard)
G silver contacts gold plated $1 \mu \mathrm{~m}$

## Actuators

01 with polymer push button
02 with metal push button

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Limit Switches category:
Click to view products by Pizzato manufacturer:
Other Similar products are found below :
6LS2-4PG 5ML1-E1 5ML31 LZG1 LZL1-6C 622EN114-R 622EN18-6 622EN224-6B 622EN230 622EN237-R 622EN69-3 622EN85-RB MA-10019 6PA109 7LS51 $8354700183725002 \underline{83830001} 8384000183840701838410018387010483881140$ 8AS42 8LS10 8LS1254PG 8LS152-4PGN20 914CE16-3A 914CE3-3L1 915PA10 91MCE16-P2O 924CE16-Y3 924CE1-S6 924CE1-T25A 924CE1-T3 924CE1T9A 924CE2-T9 924CE31-Y20-X5 924CE31-Y3L1 GL-10054 GL-85710 GL-85714 GLAB26J2B GLDB03C-6 GLZ324 PS21R-NT11N7-YK0 D4A-1106N D4A-3E02N D4A-4510N D4A-4516N

