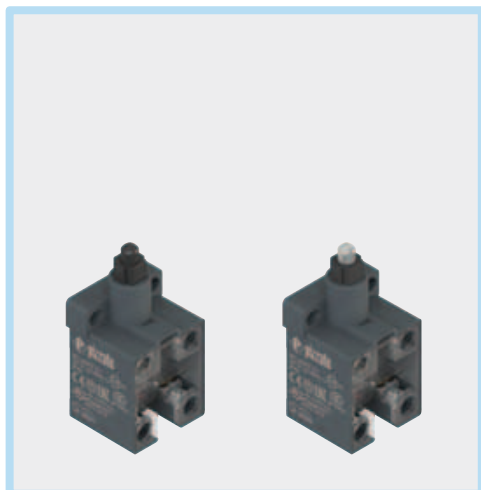




Main features

- Technopolymer housing
- Protection degree IP20 (terminals), IP40 (contacts)
- 14 contact blocks available
- Actuators with plastic or metal button
- Contact block with positive opening $\ominus$
- For internal use in PA, PX, PC series foot switches

Quality marks:



UL approval: E131787
 CCC approval: 2013010305600704
 EAC approval: RU C-IT.AQ35.B.00454

Installation for safety applications:

Use only switches marked with the symbol $\ominus$ next to the product code. Always connect the safety circuit to the **NC contacts** (normally closed contacts: 11-12, 21-22 or 31-32) as required by **EN ISO 14119, paragraph 5.4** for specific interlock applications and **EN ISO 13849-2 table D3** (well-tried components) and **D.8** (fault exclusions) for safety applications in general. Actuate the switch **at least up to the positive opening travel** reported in the travel diagrams. Actuate the switch **at least up to the positive opening force**, reported in brackets below each article, aside the minimum force value.

⚠ If not expressly indicated in this chapter, for correct installation and utilization of all articles see the instructions given on pages 211 to 222.

Technical data

Housing

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

Protection degree: IP20 (terminals), IP40 (contacts) acc. to EN 60529

General data

Ambient temperature: -40°C ... +80°C
 Safety parameter B_{10D} : 40,000,000 for NC contacts
 Max. actuation frequency: 3600 operating cycles/hour
 Mechanical endurance: 20 million operating cycles
 Max. actuation speed: 0.5 m/s
 Min. actuation speed: 1 mm/s (slow action)
 0.01 mm/s (snap action)

Tightening torques for contact block screws: 0.6 ... 0.8 Nm

Cable cross section (flexible copper strands)

Contact blocks: min. 1 x 0.5 mm² (1 x AWG 20)
 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 18, 37, 66, 67. max. 2 x 2.5 mm² (2 x AWG 14)

In compliance with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60947-1, IEC 60204-1, EN 60204-1, EN ISO 14119, EN ISO 12100, IEC 60529, EN 60529, UL 508, CSA 22.2 No. 14.

Approvals:

UL 508, CSA 22.2 No. 14, EN 60947-1, EN 60947-5-1

Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU.

Positive contact opening in conformity with standards:

IEC 60947-5-1, EN 60947-5-1.

Electrical data

Thermal current (I_{th}): 10 A
 Rated insulation voltage (U): 500 Vac 600 Vdc
 Rated impulse withstand voltage (U_{imp}): 6 kV
 Conditional short circuit current: 1000 A acc. to EN 60947-5-1
 Protection against short circuits: type aM fuse 10 A 500 V
 Pollution degree: 3

Utilization category

Alternating current: AC15 (50÷60 Hz)
 Ue (V) 250 400 500
 Ie (A) 6 4 1
 Direct current: DC13
 Ue (V) 24 125 250
 Ie (A) 6 1.1 0.4

Features approved by UL

Utilization categories Q300 (69 VA, 125-250 Vdc)
 A600 (720 VA, 120-600 Vac)

Housing data: opEN type

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

In compliance with standard: UL 508, CSA 22.2 No. 14

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

Description



Contact block with captive screws, finger protection and self-lifting clamping screw plates. Provided with positive opening NC contacts for safety applications. Provided with twin bridge contacts, they are particularly suitable for high-reliability applications. Suitable for installation inside PA, PX and PC series foot switches.

Dimensional drawings

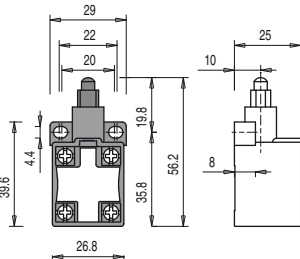
All measures in the drawings are in mm

Contact type:

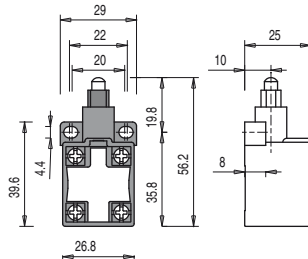
- R** = snap action
- L** = slow action
- LO** = slow action make before break
- LS** = slow action shifted
- LV** = slow action shifted and spaced
- LA** = slow action closer

Contact block

Technopolymer button



Metal button



Travel diagrams

5	R	VF B501	➔ 1NO+1NC	VF B502	➔ 1NO+1NC	
6	L	VF B601	➔ 1NO+1NC	VF B602	➔ 1NO+1NC	
7	LO	VF B701	➔ 1NO+1NC	VF B702	➔ 1NO+1NC	
9	L	VF B901	➔ 2NC	VF B902	➔ 2NC	
10	L	VF B1001	2NO	VF B1002	2NO	
11	R	VF B1101	➔ 2NC	VF B1102	➔ 2NC	
12	R	VF B1201	2NO	VF B1202	2NO	
13	LV	VF B1301	➔ 2NC	VF B1302	➔ 2NC	
14	LS	VF B1401	➔ 2NC	VF B1402	➔ 2NC	
15	LS	VF B1501	2NO	VF B1502	2NO	
18	LA	VF B1801	➔ 1NO+1NC	VF B1802	➔ 1NO+1NC	
37	L	VF B3701	➔ 1NO+1NC	VF B3702	➔ 1NO+1NC	
66	L	VF B6601	➔ 1NC	VF B6602	➔ 1NC	
67	L	VF B6701	1NO	VF B6702	1NO	
Max. speed		0,5 m/s		0,5 m/s		
Actuating force		8 N (20 N ➔)		8 N (20 N ➔)		

Legend

■ Closed contact | □ Open contact | ⊕ Positive opening travel acc. to IEC 60947-5-1 | ► Pushing the switch / ◄ Releasing the switch

Code structure

article options
VF B501-G

Contact block

5	1NO+1NC, snap action
6	1NO+1NC, slow action
7	1NO+1NC, slow action, make before break
9	2NC, slow action
10	2NO, slow action
11	2NC, snap action
12	2NO, snap action
...	

Contact type

	silver contacts (standard)
G	silver contacts with 1 µm gold coating
G1	silver contacts with 2.5 µm gold coating

Actuators

01	with technopolymer button
02	with metal button

Items with code on **green** background are stock items

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