

Main data

- Polymer housing
- 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:

Approval UL: E131787

Technical data

Housing

Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin

Protection degree: IP20 (terminals), IP40 (contacts)

General data

Ambient temperature:	from -25°C to +80°C
Version for operation in ambient temperature from -40°C to +80° C on request	
Max operating frequency:	3600 operations cycles[1]/hour
Mechanical endurance:	20 million operations cycles[1]
Maximum actuation speed:	0,5 m/s
Minimum actuation speed:	1 mm/s (slow action) 0,01 mm/s (snap action)

(1) One operation cycle means two movements, one to close and one to open contacts, as foreseen by IEC 947-5-1 standard.

Cross section of the conductors (flexible copper wire))

Contact blocks 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 18:	min.	1 x 0,5 mm^2	(1 x AWG 20)
	max.	2 x 2,5 mm^2	(2 x AWG 14))

In conformity with standards:

IEC 60947-5-1, EN 60947-5-1, IEC 60204-1, EN 60204-1, EN 1088, EN ISO 12100-1, EN ISO 12100-2, IEC 529, EN 60529, NFC 63-140, VDE 0660-200, VDE 0113, CENELEC EN 50013.

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 ⊖. 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 6/1 to page 6/8.**

Electrical data

Thermal current (Ith):	10 A
Rated insulation voltage (Ui):	500 VAC 600 VDC
Protection against short circuits:	fuse 10 A 500 V type aM
Pollution degree:	3

Utilization categories

Alternate 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

Data type approved by UL

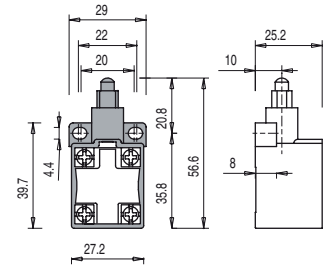
Utilization categories Q300 (69 VA, 125-250 VDC)
A600 (720 VA, 120-600 VAC)
Data of the housing type 1, 4X (indoor use only), 12, 13
In conformity with standard: UL 508
For all contact blocks use 60 or 75 °C copper (Cu) conductor and wire size No. 12-14 AWG. Terminal tightening torque of 7,1 Lb-In.

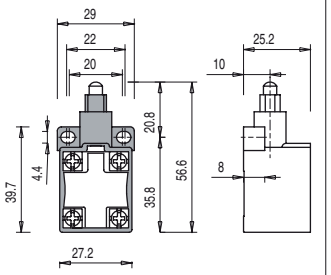
Please contact our technical service for the list of type approved products.

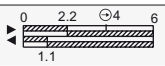
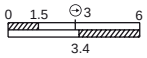
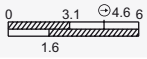
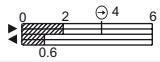
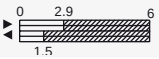
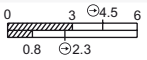
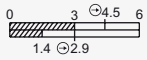
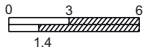
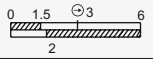
Dimensional drawings

Contacts type:

- R = snap action
- L = slow action
- LO = slow action overlapped
- LS = slow action shifted
- LV = slow action shifted and spaced
- LA = slow action closer





Contact blocks		Polymer push button		Metal push 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	
Max speed		0,5 m/s		0,5 m/s		
Min. force		8 N (20 N ⊖)		8 N (20 N ⊖)		

Code structure

article: **VF B501** options: **-G**

Contact blocks

5	1NO+1NC, snap action
6	1NO+1NC, slow action
7	1NO+1NC, slow action overlapped
9	2NC, slow action
10	2NO, slow action
11	2NC, snap action
12	2NO, snap action
13	2NC, slow action shifted and spaced
14	2NC, slow action shifted
15	2NO, slow action shifted
18	1NO+1NC, slow action closer

Actuators

01	with polymer push button
02	with metal push button

Contacts type

	silver contacts (standard)
G	silver contacts gold plated 1 µm

Accessories See page 5/1

Items with code on the **green** background are available in stock

All measures in the drawings are in mm