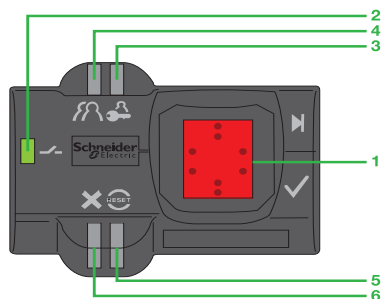


XB5 Biometric Switches

22 mm Push Buttons



XB5 S•B***



ZB5 SZ70



ZB5SZ72

The fingerprint-reading biometric switch is designed for use in industry to restrict access to systems or machines. No interface is required to program or operate the switch: it is an independent unit.

Two types of products are available:

- Maintained biometric switches, Type XB5S1B, with two fixed states
- Momentary biometric switches, Type XB5S2B, with pulse output

The biometric switch is aimed at two types of users:

- The administrator who manages the registration and deletion of fingerprints
- The operator who, once registered, uses the product as a control unit

The product is of monolithic design (a single plastic housing) and is mounted by a nut (hand-tightened without the need for tools) in a standard 22 mm diameter hole. It operates on a 24 Vdc supply.

The product connects to the power supply and to the control output (relay or PLC) with a 2 meter cable or with an M12 connector.

It can be installed on a flat, horizontal, or vertical surface.

Two protective covers are available (see Table 2)

- One to protect the active face of the sensing screen. This cover is attached with a self-adhesive hinge.
- One made of 12 gauge stainless steel—designed to cover the entire switch—which protects the entire switch from the outdoor environment (rain, sleet, snow, sunlight, UV protection). It also gives some protection from someone trying to break into the switch.

Description

The product consists of a dark gray housing, with the following on its front face:

- A sensing screen (1) that allows the registration of fingerprints and subsequent recognition of the registered fingerprints
- A green LED output state indicator (2), which illuminates when the output is activated (N.O. solid state contact)
- An orange LED (3), indicating an administrator's Registration mode
- An orange LED (4), indicating an operator's Registration mode
- A red Reset LED (5), which indicates in Delete mode that the administrator is deleting all or part of the memory
- A red LED (6) which flashes to indicate an unrecognized fingerprint or incorrect operation


Table 1: Complete Units

Description	Output	Connection	Catalog Number	\$ Price
Maintained biometric switch, 24 Vdc	PNP	2 m cable	XB5S1B2L2	580.00
		M12 connector	XB5S1B2M12	595.00
Momentary biometric switch, 24 Vdc with 0.5 s output pulse	PNP	2 m cable	XB5S2B2L2	580.00
		M12 connector	XB5S2B2M12	595.00

Table 2: Accessories

Description	Function	Catalog Number	\$ Price
Protective cover, translucent and self-adhesive	Protection of the sensing screen	ZB5SZ70	10.00
Mounting nut, Ø 22 mm	Replacement part	ZB5SZ71	6.00
Legend plate, 28 x 7 mm, self-adhesive, blank, with black background, for engraving	—	ZBY0101T	1.70
Mounting adapter	Allows this product to mount in a 30 mm mounting hole	ZBZ41	10.40
Stainless-steel protective cover	Protects switch from outside elements and vandalism	ZB5SZ72	220.00

Table 3: Biometric Switch Specifications

Biometric Switch, Types XB5S1B**** and XB5S2B****		
Product certifications		UL, CSA,  IEC 61000-6-2 / IEC 61000-6-4
Degree of protection	Conforming to EN/IEC 60529	IP 65, NEMA 1, 2, 3, 3R, 12
Ambient air temperature	Storage	-25 to +70 °C
	Operation	-5 to +50 °C
Vibration resistance	Conforming to IEC 60068-2-6	1 gn, 9 to 500 Hz. Amplitude 3 mm, 5 to 9 Hz
Electric shock resistance	Conforming to IEC60068-2-27	50 gn, duration 11 ms
Connection method	Cable	Length: 2 m, 3-wire, pre-wired
	Connector	M12
Materials	Housing	Polyamide PA66
	Cable	PvR 3 x 0.34 mm ²
Memory capacity	200 records (100 users, operators, or administrators, each registering 2 fingerprints)	
Output state indicator	Green LED	
Short-circuit protection	By gG fuse, 250 mA	
Rated supply voltage	24 Vdc with protection against reverse polarity	
Voltage limits (including ripple)	20–30 Vdc	
Switching capacity	< 200 mA with protection against overloads and short-circuits	
Residual voltage, closed state	< 1 V	
No-load current consumption	< 50 mA	
Delays	First-up	< 2 s
	Response time	< 1 s
	Recovery time	< 1 s

NOTE: Momentary switch has 0.5 s output pulse.

Figure 1: Connections

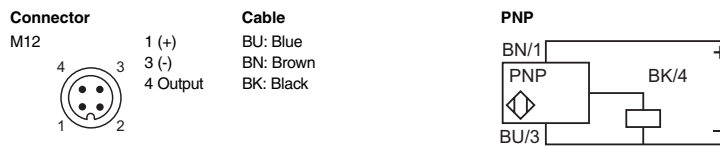
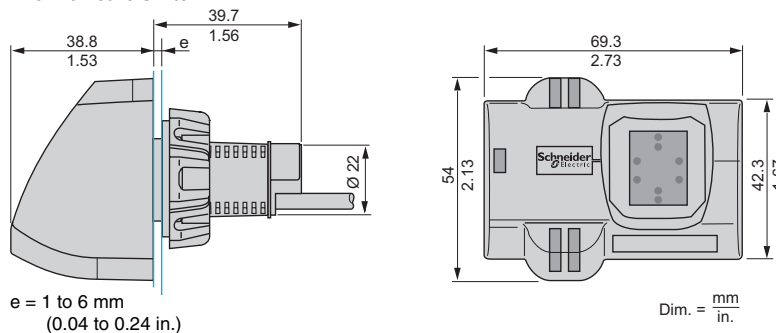
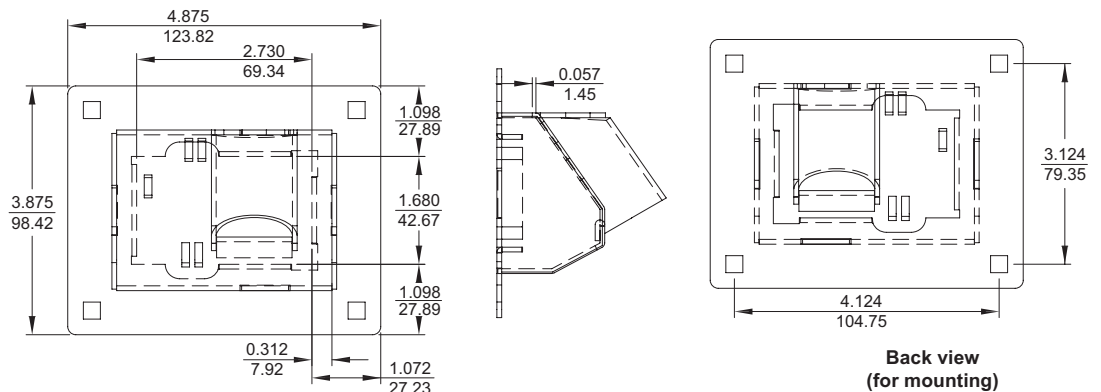


Figure 2: Dimensions

XB5 Biometric Switch



Stainless-Steel Cover



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