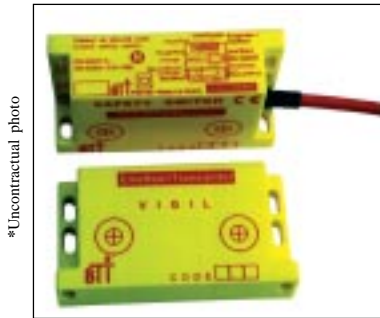




VIGIL safety switch technical data sheet

Thank you for your confidence in BTI products.
This product has been designed and manufactured to the highest quality standards.



*Uncontractual photo

1. Application:

The Vigil is a magnetic coded safety switch, available with 124 different codes. It allows the detection of the opening of guard-doors on dangerous machines. It uses our process ACOTOM3®. So it is the first switch, interactive, self-checking, in the world that detects its own failure and locks itself, preventing the safety line from closing. Composed of two elements in polycarbonate or in stainless steel 316L, one named the "transmitter", the other named the "receiver", it provides two NO contacts lines free of voltage, independent and insulated from the decoding system, giving a very high user safety, and one NC static contact, indicating the state of the switch, usable for example on an automaton.

Like all safety devices, this switch must be checked periodically

2. Compliance with the standards:

The VIGIL switch complies with the standard requirements EN60947-5-1.
VIGIL SXR : category 3 according to EN 954-1.
VIGIL SXRS : category 4 according to EN 954-1.
Protection to IP67 according to EN 60529.

3. Mounting instructions:

Fitted with two square lugs, both elements of VIGIL can be fixed very easily using 4mm diameter screws (washers provided).
Anti tamper screws and tool option.
The receiver is fitted out with a PVC multiwire cable diam. 6.8mm and standard length 3, 6 or 12 m (other lengths on request).

4. Operating:

The VIGIL is supplied with 24V AC or DC.
The VIGIL SXR version monitors the closing of the test loop. This one must be closed at the time of activating the switch. When both targets of transmitter and receiver are face to face, if the code is recognized, NO lines close and the auxiliary line opens. The yellow led lights up. If the code is not recognized, if the transmitter and the receiver are not aligned, or if the switch detects the failure of one of its safety contacts, the led is off and the lines are not controlled. In addition, the VIGIL SXRS version has a monitored contact input for the reloading
1mm distance between both elements is recommended. Detection is made at 7mm distance. Detection through 6mm stainless steel or polycarbonate wall is possible.

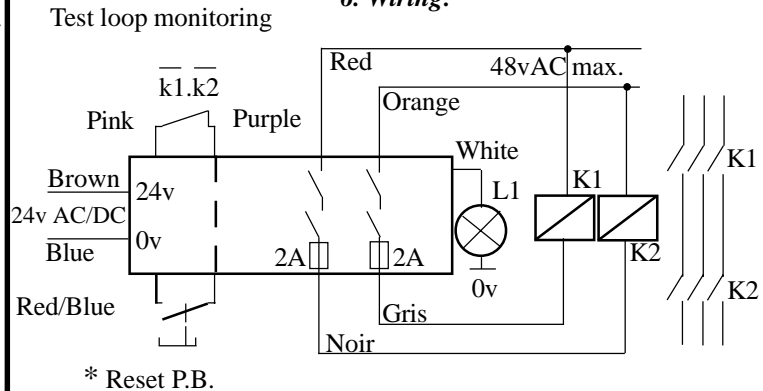
Indicator:

Led : Indicates the state of the switch.
Yellow -> Transmitter code recognized, lines closed.

5. Technical characteristics:

VIGIL		
Supply voltage	24vAC/DC -15% / +10% 50/60Hz	
Current	<70mA DC / 160mA AC	
Protection	Fast fuse 2A	
Safety lines	48vAC / 2A φ=1	
Auxiliary line	24vAC/DC / 250mA	
Detection on opening on closing	10mm 7mm	
Temperature	-25 °C / +70 °C	
Max. frequency of use	2Hz	
Protection class	IP67	
Operation life	50 000 000	
Size l x w x h	Transmitter 92 x 49 x 23 mm	Receiver 92 x 49 x 27 mm
	Weight	Transm. St.steel 550g Polyc. 140g

6. Wiring:



* The reset line is available in SXRS version only.

Any overload or short-circuit on the safety lines causes their opening in an irremediable way. If you think there is a risk, we advise you to protect the lines with 1.6A fast fuse.

7. Size:

