

# Ribbon Switches



## Information Sheet

**Stig Wahlström**   
Automatik

Box 64, 123 22 FARSTA, Sweden  
☎ +46 (0)8 683 33 00 ✉ automatik@wahlstrom.se  
Visit us at [www.swautomatik.se](http://www.swautomatik.se)

### Features

- Simple, reliable technology
- Wide range available
- Length up to 1000m
- Choice of colours
- Choice of cables & connection options
- Variety of mounting options
- TÜV approved
- Long life (in excess of 3 million operations)

Ribbon switches are press-at-any-point, momentary, normally-open contacts.

They are the essence of simplicity and reliability. These products deliver the highest levels of performance in thousands of applications ranging from general-purpose usage to severe environments.

Our ribbon switches offer a broad range of pressure sensitivities and a wide range of sheathing materials, switch lengths, end-termination seals, exterior colours, lead-wire combinations and mounting options, as well as a substantial resistance to moisture and chemicals.

Ribbon switches are incorporated in Tapeswitch edges and mats.

### Typical applications

- Special needs  
*motorised furniture—baths/chairs/worktops*
- Transportation  
*driver alerts*
- Local authorities  
*alarm systems*
- Factory automation  
*product detection*
- Sports timing  
*cycle racing, swimming events*



**Where will  
you use  
yours!**

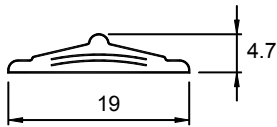




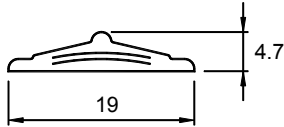
[www.tapeswitch.co.uk](http://www.tapeswitch.co.uk)

# Information Sheet

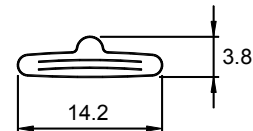
Ribbon switches can be supplied factory sealed in any length to suit the application.



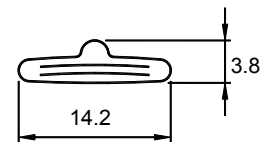
**131A** is designed typically for foot, hand or mechanical activation and can be bent around smoothly curved corners. It can be supplied with sleeve end (lower profile) or alternatively with a block end which allows for fixing with screws.



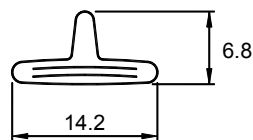
**101B** is designed typically for finger operation and can be bent around tightly curved corners. It has been used extensively in vehicle crash testing applications. The 101B can be supplied with a sleeve end (lower profile) or alternatively can be supplied with block end, which allows for fixing with screws.



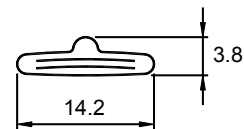
**121BP** is a very sensitive switch which can be operated directly but more commonly is integrated for indirect operation e.g. as an interlock inside a seat.



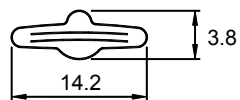
**107BP** is a variation on the BP switch and has an evoprene jacket. The properties of evoprene offer a good alternative where the toxicity of PVC is inappropriate.



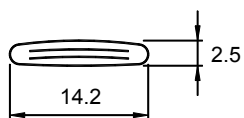
**141BPH** is a very sensitive switch with a high bead for increased operating angle. Where the application allows it can be used as a leading edge safety switch.



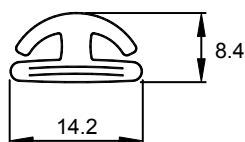
**180** is a snap action switch which operates when bent or pressed. It is typically used as a paddle or limit switch and can be mounted in a special bracket to be used as a flexswitch.



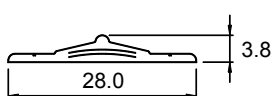
**191-S** is a switch with stainless steel conductors which means that it is suited to applications where the switch is submerged in water. It is regularly used in sports timing pads in swimming events and has even been used at the Olympic Games.



**151BBW** is a low profile, beadless switch which is highly sensitive. It has been widely used in window security applications.



**TS3** is a low profile, contoured switch which can be bent smoothly around curved corners. It is commonly used as a hand or foot activated machine stop/ start device.



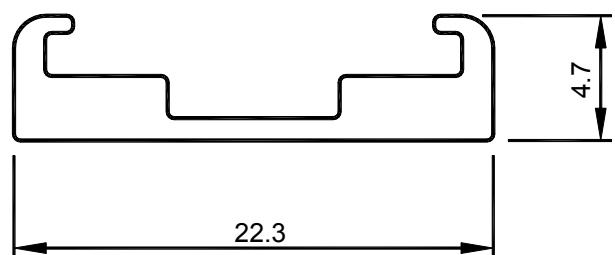
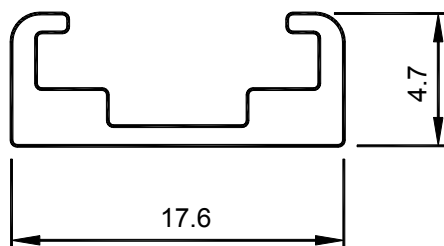
**101BS** is a variation on the B switch and is unique, this switch has an extra wide jacket offering the option to staple the switch into place. This switch has been specially designed for the motorised chair industry.

## Technical Specification

|        | Colour             | Min. bending radius | Actuating force (20mm $\varnothing$ test piece) | Sheath material | Switch termination | Ingress protection | Operating temperature | Weight | Recommended max. voltage | Max. switching current @ 30V d.c. |
|--------|--------------------|---------------------|---|-----------------|--------------------|--------------------|-----------------------|--------|--------------------------|-----------------------------------|
| 131A   | Grey               | 15mm                | <60N (6.0kg)                                    | PVC             | Sleeve/Block       | IP65               | -20°C to +50°C        | 75g/m  | 30V d.c.                 | 1A                                |
| 101B   | Yellow/Black       | 3mm                 | <26N (2.6kg)                                    | PVC             | Sleeve/Block       | IP65               | -20°C to +50°C        | 75g/m  | 30V d.c.                 | 1A                                |
| 121BP  | Green              | 4mm                 | <6N (0.6kg)                                     | PVC             | Welded end         | IP65               | -20°C to +50°C        | 65g/m  | 30V d.c.                 | 1A                                |
| 141BPH | White/Red          | 10mm                | <16N (1.6kg)                                    | PVC             | Welded end         | IP65               | -20°C to +50°C        | 65g/m  | 30V d.c.                 | 1A                                |
| 180    | Red                | <12° bends          | <12° bends                                      | PVC             | Welded end         | IP65               | -20°C to +50°C        | 65g/m  | 30V d.c.                 | 1A                                |
| 191-S  | Beige              | Do not bend         | <11N (1.1kg)                                    | PVC             | Welded end         | IP65               | -20°C to +50°C        | 50g/m  | 30V d.c.                 | 1A                                |
| 151BBW | White              | 3mm                 | N/A   | PVC             | Welded end         | IP65               | -20°C to +50°C        | 70g/m  | 30V d.c.                 | 1A                                |
| TS3    | Black/ Yellow/ Red | 30mm                | <48N (4.8kg)                                    | PVC             | Welded end         | IP65               | -20°C to +50°C        | 120g/m | 30V d.c.                 | 1A                                |
| 101BS  | Black              | 4mm                 | <26N (2.6kg)                                    | PVC             | Welded end         | IP65               | -20°C to +50°C        | 110g/m | 30V d.c.                 | 1A                                |
| 107BP  | Black              | 10mm                | <12N (1.2kg)                                    | Evoprene        | Welded end         | IP65               | -20°C to +50°C        | 50g/m  | 30V d.c.                 | 1A                                |

## Mounting Channel

Two main types of mounting channel are available; the 104 and 106 models. 104 aluminium mounting channel is designed for use with the BP and BPH style ribbon switches. 106 aluminium mounting channel is suitable for use with the A and B model ribbon switches. Additionally, the 106 type channel is available as 106P (plastic) which allows for mounting on curved surfaces.



# Information Sheet

## Order Code

XXXX / XXXX / XX / XXXX / XXXX / XX

Switch type e.g. 101B

Switch length (mm)

Lead type

(FS- fail-safe, SL- single lead standard)

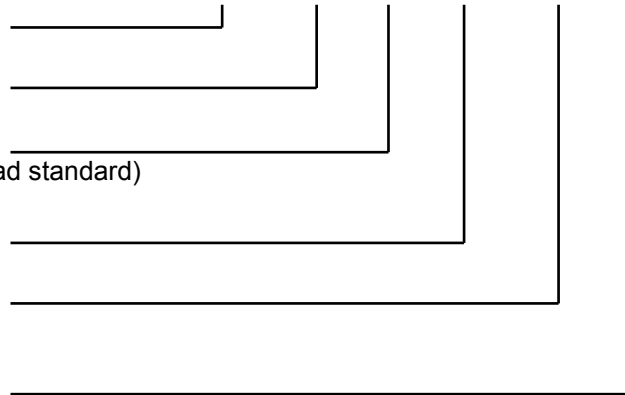
Lead 1 length (mm)

Lead 2 length (mm)

(If applicable)

Colour

(W-white, R-red,  
BK-black, Y-yellow,  
GN-green, BN-beige,  
GY-grey)



**This is only a sample order code. If you have any special requirements, please contact our sales team.**

**Stig Wahlström**   
Automatik 

Box 64, 123 22 FARSTA, Sweden

+46 (0)8 683 33 00  automatik@wahlstrom.se

Visit us at [www.swautomatik.se](http://www.swautomatik.se)

 tapeswitch

[www.tapeswitch.co.uk](http://www.tapeswitch.co.uk)

