



Ribbon Switches

Information Sheet



Features

- Simple, reliable technology
- Wide range of models
- Easy installation
- TÜV approved (fail-safe models)
- Custom sizes
- Long life

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

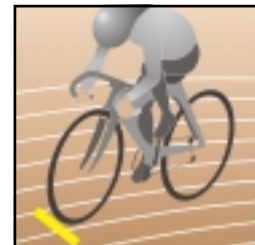
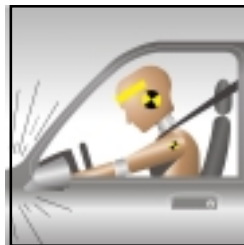
They are the essence of simplicity and reliability. These products deliver the highest levels of performance in thousands of applications ranging from general-purpose usage to severe environments.

Our standard models 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 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, Patient Alerts
- Factory Automation
Product Detection
- Sports Timing
Cycle Racing, Swimming Events



**Where will
you use
yours!**



Tapeswitch Ltd.
Unit 38 Drumhead Road
Chorley North Industrial Park, Chorley
Lancs PR6 7BX England
Tel: +44 1257 249777
Fax: +44 1257 246600
e-mail: info@tapeswitch.co.uk
web: www.tapeswitch.co.uk

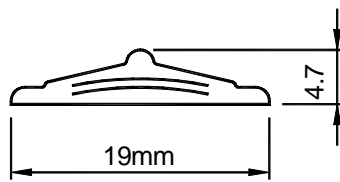
Tapeswitch GmbH
Grein Tapeswitch
Tapeswitch Corporation
Tapeswitch Japan
Tapeswitch Canada

Tel: +49 5101 14490
Tel: +39 226300 140
Tel: +1 631630 0442
Tel: +81 3 5676 5421
Tel: +1 519681 2980

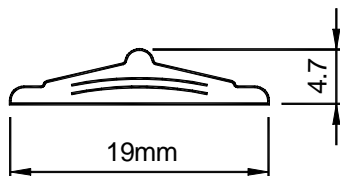
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Fax: +39 226300 711
Fax: +1 631630 0454
Fax: +81 3 5676 5422
Fax: +1 519685 9318

General Purpose Switches

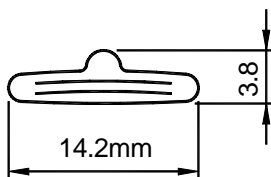
Ribbon switches can be supplied factory sealed in any length to suit the application. These are two main classifications of ribbon switches, general purpose and special purpose. As the name suggests, the general purpose range of switches are extremely versatile and have endless application possibilities. There are 4 basic models:



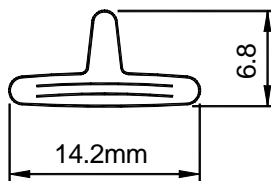
131A is designed typically for foot, hand or mechanical activation and can be bent around smoothly curved corners. It can be supplied with sleeve end (lower profile) or alternatively with a block end which allows for fixing with screws.



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.



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.

Technical Specification

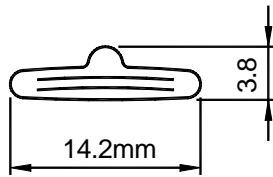
	131A	101B	121BP	141BPH
Colour	Grey	Yellow / Black	Green	White / Red
Min. bending radius	15mm	3mm	4mm	10mm
Actuating force 20mm \varnothing test piece	<15N (1.5kg)	<5N (0.5kg)	<2N (0.2kg)	<4N (0.4kg)
Sheath material	PVC	PVC	PVC	PVC
Switch termination	Sleeve / Block	Sleeve / Block	Welded end	Welded end
Ingress protection	IP65	IP65	IP65	IP65
Operating temperature	- 20°C to +50°C	- 20°C to +50°C	- 20°C to +50°C	- 20°C to +50°C
Weight	75g/m	75g/m	65g/m	65g/m
Recommended max. voltage	30Vdc	30Vdc	30Vdc	30Vdc
Max. switching current @ 30Vdc	1A	1A	1A	1A

Tapeswitch Ltd.
Unit 38 Drumhead Road
Chorley North Industrial Park, Chorley
Lancs PR6 7BX England
Tel: +44 1257 249777
Fax: +44 1257 246600
e-mail: info@tapeswitch.co.uk
web: www.tapeswitch.co.uk

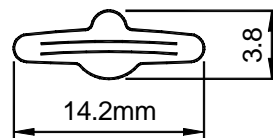
Tapeswitch GmbH	Tel: +49 5101 14490	Fax: +49 5101 14499
Grein Tapeswitch	Tel: +39 226300 140	Fax: +39 226300 711
Tapeswitch Corporation	Tel: +1 631630 0442	Fax: +1 631630 0454
Tapeswitch Japan	Tel: +81 3 5676 5421	Fax: +81 3 5676 5422
Tapeswitch Canada	Tel: +1 519681 2980	Fax: +1 519685 9318

Special Purpose Switches

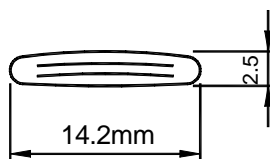
The special purpose range of ribbon switches have more specific design properties than those of the general purpose range making them more suited to specialist applications. There are 6 models:



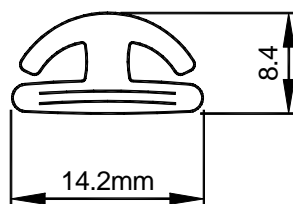
180 is a snap action switch which operates when bent or pressed. It is typically used as a paddle or limit switch and can be mounted in a special bracket to be used as a flexswitch.



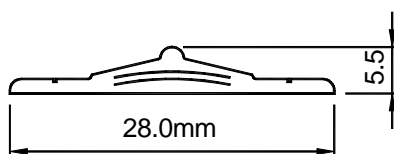
191-S is a switch with stainless steel conductors which means that it is suited to applications where the switch is submerged in water. It is regularly used in sports timing pads in swimming events and has even been used at the Olympic Games.



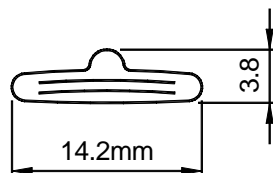
151BBW is a low profile, beadless switch which is highly sensitive. It has been widely used in window security applications.



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.



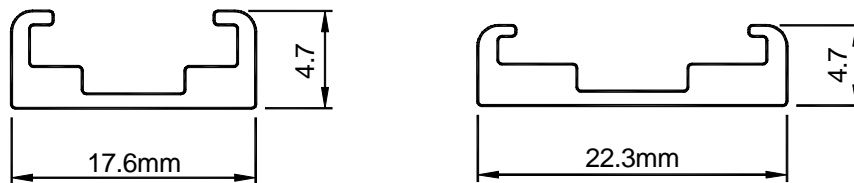
107BP is a variation on the BP switch and has an evoprene jacket. The properties of evoprene offer a good alternative where the toxicity of PVC is inappropriate.

Technical Specification

	180	191-S	151BBW	101BS	107BP	TS3
Colour	Red	Beige	White	Black	Black	Black, Yellow, Red
Min. bending radius	<12° bends	Do not bend	3mm	4mm	10mm	30mm
Actuating force 20mmø test piece	<12° bends	<5N (0.5kg)	<2N (0.2kg)	<25N (2.5kg)	<10N (1kg)	<15N (1.5kg)
Sheath material	PVC	PVC	PVC	PVC	Evoprene	PVC
Switch termination	Welded end	Welded end	Welded end	Welded end	Adhesive lined shrink sleeving	Welded end
Ingress protection	IP65	IP65	IP65	IP65	IP65	IP65
Operating temperature	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Weight	65g/m	50g/m	70g/m	110g/m	50g/m	120g/m
Recommended max. voltage	30Vdc	30Vdc	30Vdc	30Vdc	30Vdc	30Vdc
Max. switching current@ 30Vdc	1A	1A	1A	1A	1A	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.



Order code

Switch type i.e.101B

Switch length (mm)

Lead type

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

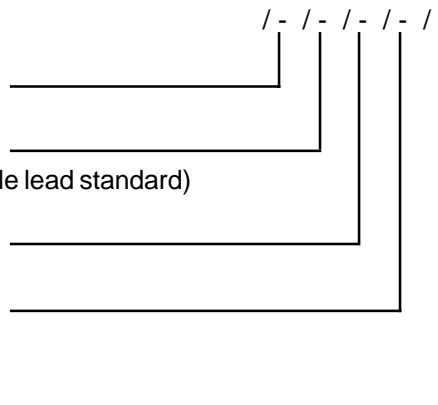
Lead 1 length (mm)

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.

Example: 101B / 0500 / SL / 0450 / - / Y

Tapeswitch Ltd.
Unit 38 Drumhead Road
Chorley North Industrial Park, Chorley
Lancs PR6 7BX England
Tel: +44 1257 249777
Fax: +44 1257 246600
e-mail: info@tapeswitch.co.uk
web: www.tapeswitch.co.uk

Tapeswitch GmbH
Grein Tapeswitch
Tapeswitch Corporation
Tapeswitch Japan
Tapeswitch Canada
Tel: +49 5101 14490
Tel: +39 226300 140
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Tel: +81 3 5676 5421
Tel: +1 519681 2980

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Fax: +39 226300 711
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Fax: +1 519685 9318