



A full spectrum of sensing and signaling products for protection, detection, and safety



SWITCH PRODUCTS

SAFETY & SIGNAL MATS

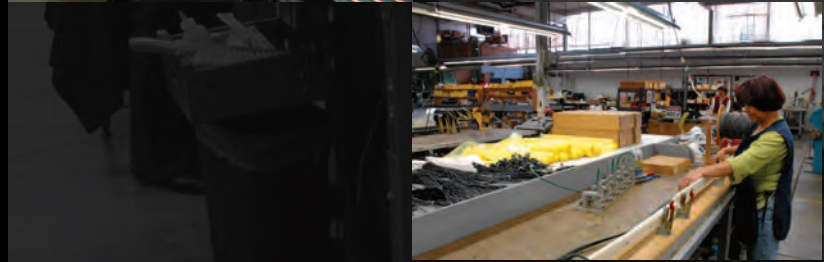
SENSING EDGES

SENSING BUMPERS

INTERFACE CONTROLLERS

LIGHT CURTAINS

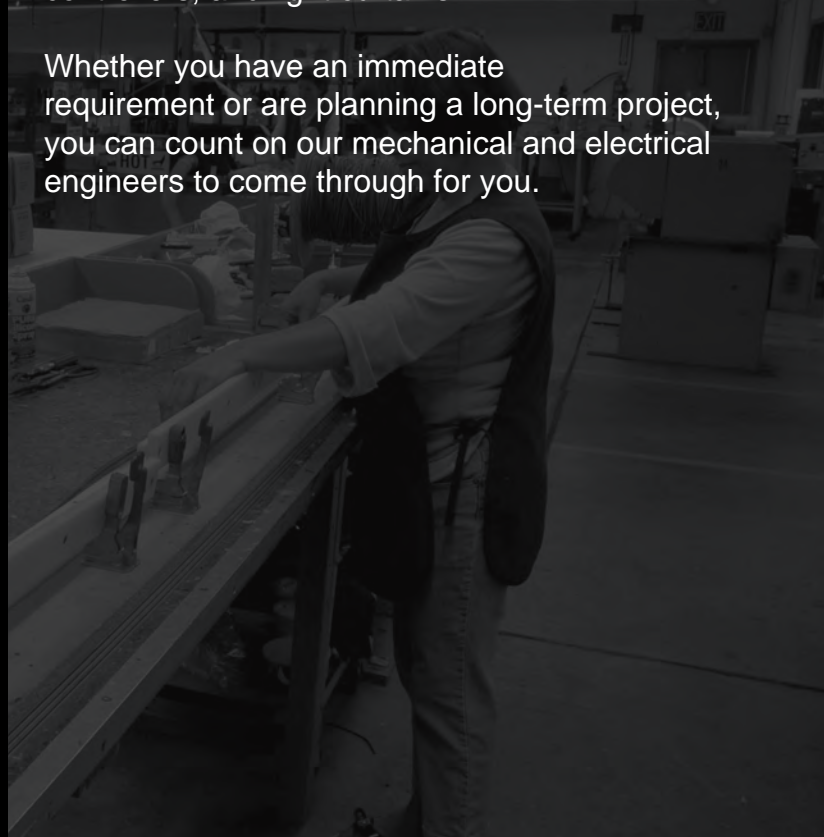
CUSTOM DESIGNS

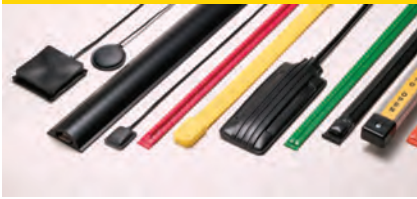


Welcome to Tapeswitch

We design and manufacture innovative sensing, switching, and control products for use in a wide range of safety and non-safety applications. Our products include ribbon switches, sensing edges and bumpers, safety mats, touch pads, controllers, and light curtains.

Whether you have an immediate requirement or are planning a long-term project, you can count on our mechanical and electrical engineers to come through for you.





pg.2 Switch Products

A diverse selection of products including ribbon switches, touchpads, foot and hand switches, tactile remote switches, vehicle sensing products, and innovative custom designs.



pg.3 Safety & Signal Mats

The broadest range of standard and custom-designed pressure-sensitive mats available. Serving industrial, commercial, transportation and specialty applications for over 50 years.



pg.4 Sensing Edges

Collision and contact protection with a compact, compliant surface. Choice of profile, sensitivity, and overtravel characteristics.



pg.5 Sensing Bumpers

Pressure-sensitive actuation with a large, cushioning surface that protects both personnel and equipment.



pg.6 Interface Controllers

Provides the fail-safe link between a sensing device and a machine or process. Compatible with our switches, mats, sensing edges and bumpers.



pg.7 Light Curtains

Choice of full-featured or economical models that meet the most rigorous international safety standards. Custom versions available for harsh environments.



pg.8 Custom Designs

Products designed to solve unique problems. We specialize in innovative solutions for unusual or difficult applications.

SWITCH PRODUCTS

Since Tapeswitch invented **Ribbon Switch** technology more than 50 years ago, we have incorporated this technology in thousands of standard and custom switching, sensing, and signaling applications. Below are examples of our most popular designs.

Controflex™ Ribbon Switches – Press-at-any-point actuation in any length.

Normally-open, momentary-contact switches for sensing, control, and other low-voltage applications. The essence of simplicity and reliability, they are suitable for applications ranging from general purpose switching to protection of personnel from safety hazards. Available to meet a wide range of environmental and sensitivity requirements, ribbon switches are manufactured per customer requirements and are also available in kit form.



NexGen™ Switches – Rugged, enclosed, impact-resistant switches.

Designed for situations where switch size, visibility, and ease of operation are important, or where switch damage through abuse or vandalism is a concern. Typical applications include passenger signaling, machine emergency stop, podium or stage signaling, and transportation switch applications. NexGen™ Switches meet ADA requirements.



Touchpads – Stock sizes available in 2"x 2" & 4"x 4". Custom sizes also available.

Normally-open, press-to-activate switches that are highly water resistant and easily mountable using a frame or adhesive. Custom touchpads are available in any color and with or without logos, text, or graphics. Available upon request.

Suitable for emergency stops, door operation, ADA applications or anywhere a large switch is required.



Foot and Hand Switches – Can be pressed, squeezed, or stepped on to activate.

Tapeswitch can design and manufacture custom models to customer specifications.



Sensing Cells – Low-profile, sealed sensing switches in "wafer" form.

They are surface mounted and typically used under objects to detect removal.



Vehicle Sensing Products – Car wash mats and road switches.

Used for process control or vehicle counting, these switches are extremely rugged and long lasting. They are sealed for weather and water resistance.

Available in rigid and flexible models, ramped for surface mounting and square-edged for flush mounting. Available in lengths up to 4 feet.



SAFETY & SIGNAL MATS

Tapeswitch offers the widest range of safety mat products in the industry. We are also the leader in **Custom Mats** and **Mat Systems** and can supply nearly any size or shape, including mats with multiple zones, custom angles, curves, and cutouts. When it comes to safety mats, we have you covered.

Safety Mats

ControlMat Industrial-Duty Safety Mats – Heavy-duty and abrasion-resistant.

For personnel sensing around dangerous machinery and in hazardous locations.



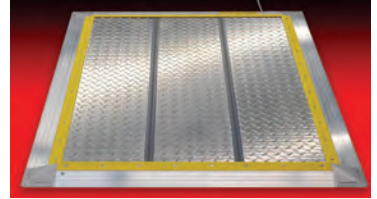
ArmorMat Impact-Resistant Safety Mats – Extra-heavy duty and nearly puncture-proof.

Incorporates an impact and penetration resistant barrier that easily withstands abuse that would destroy ordinary pressure-sensitive mats.



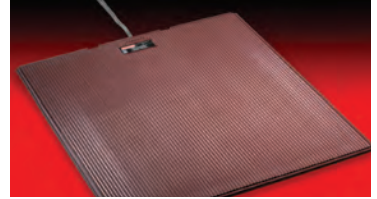
Diamond Plate Aluminum Safety Mats – Super heavy-duty and nearly indestructible.

Designed for personnel or vehicle detection. Withstands forklift traffic, steel wheel carts, pallet loaders and similar equipment, and survives welding debris, hot parts, metal chips, and foundry spatter.



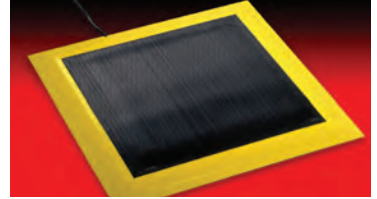
Safety Zone Sensing Mats – Molded construction, parallel plate design.

Molded, seamless construction provides exceptional resistance to moisture intrusion. Choice of ribbed, eurodot, or smooth surface. Form, fit, and function replacements available for most brands of molded mats. Can be manufactured with any color or logo.



Comfort Zone Safety Mats – Anti-fatigue surface with pressure-sensitive switching.

The only pressure-sensitive switching mat with an ergonomically-designed anti-fatigue surface. For safety applications where an operator must stand on the mat frequently or for extended periods during machine cycle times.



Non-safety Signaling Mats

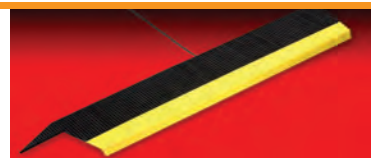
CVP Sensing Mats – Commercial-duty signaling mat, economical design.

CVP Sensing Mats are designed for commercial control, signaling, and counting applications. They feature minimum thickness, maximum durability and low cost.



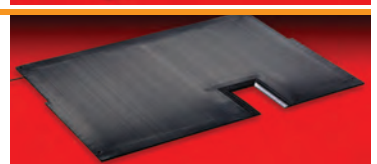
Matex® Treadle Switch Mats – For trains, buses, and other public transit.

Used for door or gate operation, escalator control, and customer counting. Custom designed for each application.



Wheelchair Lift Sensing Mats – For wheelchair lifts on buses and vans.

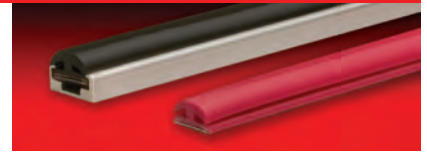
Detects presence of wheelchair or scooter on bus- or van-mounted lift. Designed to provide an exact fit for each application.



SENSING EDGES

Tapeswitch **Sensing Edges** can be used to protect personnel from injury, to protect equipment from damage, or simply to signal contact between two objects. They are available in a wide range of size, sensitivity, and overtravel choices as well as in curved and circular models.

TS-3 Micro Sensing Edge – Lowest profile with high sensitivity.
Immediate actuation, no overtravel.



TS-16 & TS-6 Mini-Sensing Edges – Low profile with high sensitivity, end caps available.
Immediate actuation, no overtravel (TS-6).
Immediate actuation, 1/4" of overtravel (TS-16).



TS-18 & TS-8 Mini-Sensing Edges – Low profile, end caps available.
Immediate actuation, no overtravel (TS-8).
Immediate actuation, 1/4" of overtravel (TS-18).



TS-26 Sensing Edge – Low profile, end caps available.
Compliance before actuation, 3/8" of overtravel.



TS-46 Sensing Edge – Medium profile, medium sensitivity.
Compliance before actuation, 3/4" of overtravel, crimp-on mounting channel.



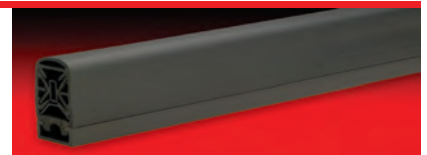
TS-48 Sensing Edge – Medium profile, medium sensitivity.
Same specifications as TS-46, except with a snap-in mounting channel.



TS-47 & TS-57 – High sensitivity, no compliance for fastest activation.
Substantial overtravel for maximum cushioning.



TS-67 Omni-Directional Sensing Edge – High sensitivity from any direction.
Immediate actuation, 1" of overtravel.



TS-108 & TS-109 – Self-mounting, side activation, 50% overtravel.
For residential and commercial applications.



SENSING BUMPERS

Tapeswitch **Sensing Bumpers** provide a large, compliant surface that protects both personnel and equipment by detecting contact or impact before damage is done. Usually customized, they are available in various sensitivities, profiles, colors, and lengths. Internal switching elements are UL and cUL recognized.

SE-45 & SE-75 Sensing Bumpers – For general purpose, heavy-duty applications.

Sensitivity is 20 lbs. nominal, with substantial overtravel cushioning. Exterior housing is EPDM rubber, which is resistant to water, oil, hydraulic fluid, and coolants. These bumpers feature easy bolt-on mounting with adjustable side bolt locations.



Hercules Ruggedized Sensing Bumper – For hostile environments that are off-limits to conventional bumpers.

Originally designed for marine environments. Encapsulated in a rugged polyurethane shell that meets MIL-STD-810E salt fog requirements. This bumper is abrasion-resistant, impact-resistant, and crush-resistant. It also stands up to many common industrial chemicals and fluids.



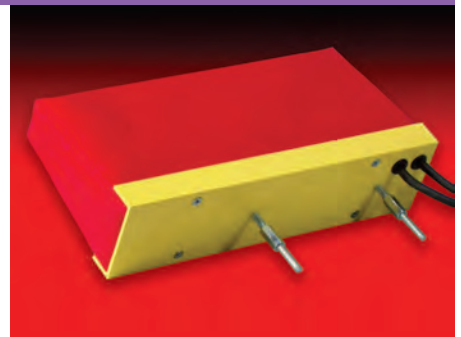
VB Series High-Impact Sensing Bumper – For applications subject to repeated high impacts.

Designed to survive repeated severe impacts that can destroy a conventional bumper. Provides uniform sensitivity over the entire bumper surface and requires no guide wires or adjustments. Suitable for use on AGVs, mobile platforms, traveling conveyors and other moving equipment and machinery.



SE-C Custom Sensing Bumpers – Various sensitivities, profiles, colors, and lengths.

Designed to fit custom application needs. Extra-large sizes are available, as well as multiple-surface detection and multiple zones. Nylon-reinforced exterior resists water, oil, hydraulic fluid, and coolants. Mounting options include studs and threaded holes.



INTERFACE CONTROLLERS

Tapeswitch offers a wide variety of **Interface Controllers** that are compatible with our switches, mats, sensing edges, and bumpers. These are available in a choice of mounting styles, voltage ranges, status indicators, and reset options. Select the one that best matches your specific application needs.

C6 Multifunction Controller – Supports up to 6 zones.

Designed to monitor up to six zones, consisting of 1 to 3 B-Series Light Curtains and/or 1 to 6 other sensing devices, including ribbon switches, sensing edges, bumpers and safety mats. In addition, it supplies power for B-Series Light Curtains. This fail-safe controller detects sensor, cabling, and internal faults.

Housed in a wall-mounted Nema enclosure, it operates on 110/240 Vac or 24 Vdc, and can be configured for manual or automatic reset or a combination of both.



PRSU Control Units – Our most compact fail-safe module.

Can be used for high-risk automation and machine control applications. Compatible with all Tapeswitch sensing products, including switches, edges, bumpers, and mats. This controller exceeds the requirements of category 3 of EN 954-1 and meets or exceeds the safety content of the applicable OSHA, ANSI, and RIA standards.

Available in a DIN rail-mounted package, with two power options. PRSU/4 operates on 24VDC or VAC supply, PRSU/5 operates on 115VAC supply. Both models feature manual and automatic reset capability.



MultiZone Controller - Custom designs for custom controls.

Acts as an interface between various Tapeswitch sensing devices and a machine or process control. Designed to monitor up to 6 zones and provides power to all connected B-series Light Curtains emitters and receivers and monitors the output signals.

Also interfaces with a variety of pressure sensitive, normally-open switches made by Tapeswitch, including ribbon switches, sensing edges/bumpers.

PSSU Control Units – 6 fail-safe models in 3 package styles.

For high-risk automation and machine control applications. These controllers exceed the requirements of category 3 of EN 954-1 and meet or exceed the safety content of the applicable OSHA, ANSI, and RIA standards.

Available in wall-mounted and DIN rail-mounted versions with voltage options of 110/240Vac or 24 Vdc operation. Auto or manual reset, depending on model.



PSCU Control Units – For low-risk control applications.

Suitable for low-risk automation and machine control. These CE-certified units have a single form C output relay which changes state when the sensor is actuated.

Choice of 11-pin plug-in or DIN rail mounting. Voltage options of 110/240 Vac or 24 Vdc for DIN unit, 24 Vdc for 11-pin plug-in unit. Selectable manual or automatic reset.



LIGHT CURTAINS

Tapeswitch **Light Curtains** conform to ANSI, RIA, CE, UL, and cUL requirements. They use an LED beam array to detect fingers, hands, arms, or torsos, and are suitable for the most dangerous machine guarding applications, as well as perimeter guarding and access control applications.

B-Series Safety Light Curtains – Full-featured and sophisticated.

Microprocessor-controlled units with beam-blanking capabilities and a flexible interface that is compatible with common safety relay units, controllers, and fail-safe PLCs. Meets EN 61496 type 4 design requirements.

The emitter and receiver pair, by themselves, constitute a complete light curtain system, providing two redundant solid state PNP outputs, which can be interfaced directly into compatible machine control circuits.



B-Series Perimeter Guards – For safety and security applications.

Available with 2, 3, or 4 beams. Used to protect hazardous areas such as automated work cells or to monitor access or traffic in secure locations. The difference between models is the beam spacing.

Perimeter guards use the same circuitry and provide the same high level category 4 safety integrity as the B-Series light curtains.



Slant-Guard Angled Light Curtains – Two or more light curtains integrated into one.

A specially-configured, multi-segment model which is designed to replace master/slave or cascaded units with a single integrated unit. The Slant-Guard light curtain can have two or more segments, each at a different angle, up to a maximum total length of six feet. It can be mounted horizontally to provide protection on two or more sides, or vertically to provide protection in diagonal planes.



Hard Guard Light Curtains – Impervious to water, dust, dirt, and oil.

Designed for harsh industrial environments or outdoor applications. Available in either a tough, transparent acrylic housing or a rugged aluminum enclosure. Protected against water (including wash down), dust, dirt, oil, and many solvents, it is ideal for heavy industrial applications, food processing, or outdoor safety and security applications.



Mats designed to solve specific problems

We can supply nearly any size and shape, including mats with odd angles, curves, and cutouts. Custom mats can help you guard machines, work cells, and robotic installations. They can be designed to protect areas that have vehicular traffic, hot parts or welding debris or for extreme conditions that would destroy conventional mats.



Panic Alarm Signaling System

The PASS system is a press-at-any-point switch-strip that can be easily operated by a hand, finger, arm, and foot.



Tactile Remote Switches

Activates lights, lasers, and scopes with minimum pressure. Custom sizes and lengths available to suit individual application requirements.



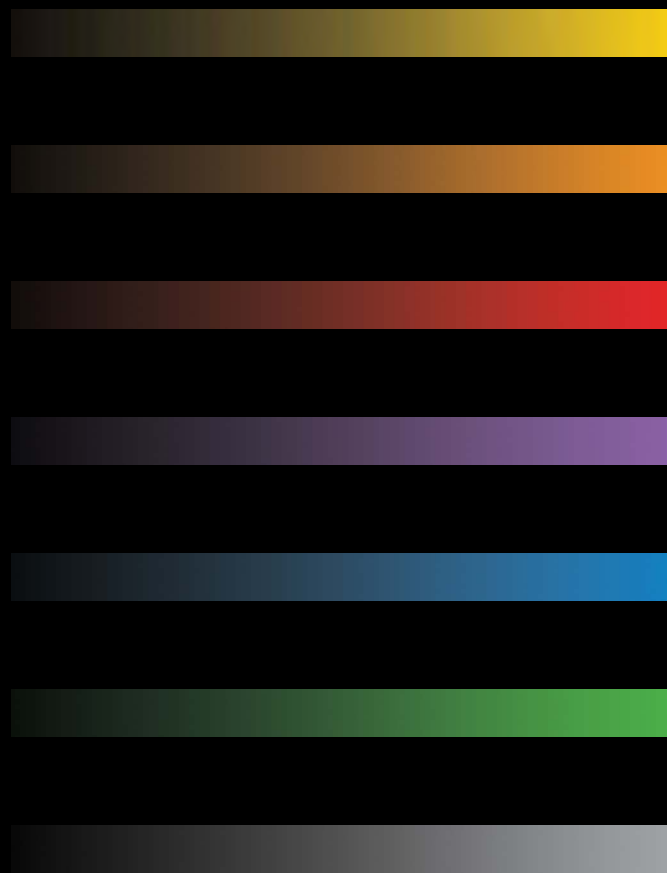
Custom bumpers to match customer requirements

Custom sensing bumpers can be made in a variety of sensitivities, profiles, colors, and lengths. Special options include multiple surface detection, multiples zones, and high sensitivity. Corner designs and extra-large sizes which provide additional overtravel are also available.





Because we are constantly improving our products, specifications are subject to change without notice.



A sample of industries we serve.



MANUFACTURING

MILITARY



MINING

MEDICAL



TRANSPORTATION

ENTERTAINMENT



Please refer to our web site to locate your nearest representative.



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