

CUSTOM-ENGINEERED BELLWS

Dynatect's bellows portfolio offers the greatest variety of cover materials and construction methods available anywhere; your sales representative is in a position to give you an unbiased recommendation as to the proper product for your application.

When a protective cover design is needed, our engineers analyze the application, suggest the method of manufacture, the materials to be used and any other design considerations required to meet the needs of the specific application. This includes the necessary mounting material, metal work, guides or supports, so that you receive a finished product ready to apply to your machine.

OPTIMIZING YOUR DESIGN

When designing your bellows, we consider the following factors to optimize your design:

- Space available for cover in retracted positions, as well as cross sectional areas
- Interference points along travel path

COVER SHAPE AND ORIENTATION

- Necessary cover support for long travel and maximum unsupported span
- Type and volume of contaminants
- Fitness for operating purpose: temperature extremes, high-cycle operating, acceleration, environment
- Ventilation for sealed covers

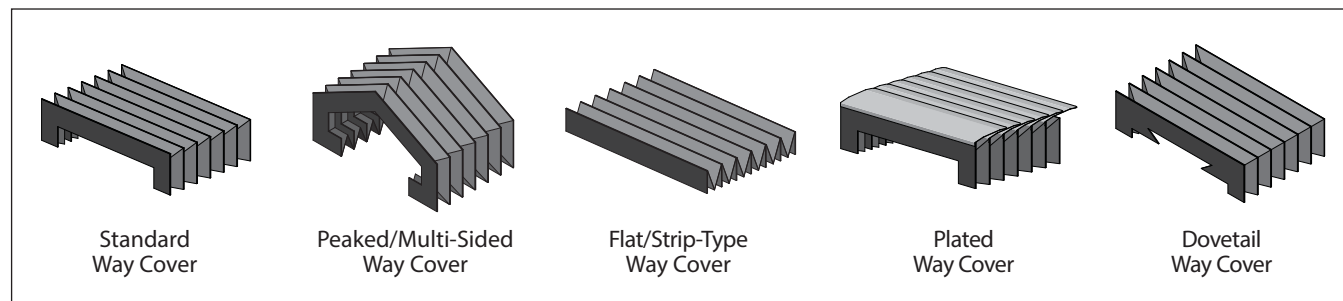


CUSTOM-ENGINEERED BELLOWS

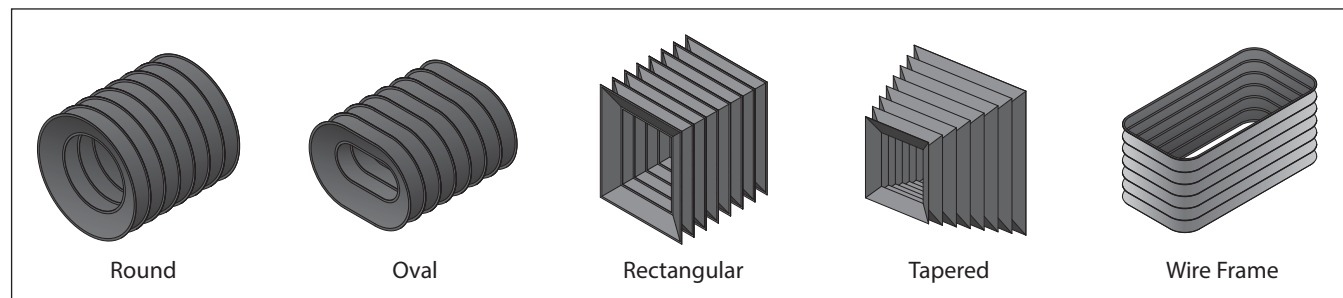
BELLOWS DESIGNED TO FIT ALL SHAPES AND SIZES

We supply custom bellows in virtually any shape. A few examples of bellows shapes/profiles are shown below. Our database contains over 10,000 protective covers which gives our design team a superior frame of reference to supply the right bellows, quickly and cost-effectively.

OPEN/WAY COVER SHAPES



ENCLOSED SHAPES



PRE-ENGINEERED STANDARD BELLOWS FROM STOCK

Our most popular bellows are available in pre-selected sizes and materials, with short lead times.

Standard Sewn Bellows:

For 12-inch length increments and shipment within 1-2 business days, see pages 28-29. For longer lengths (typical delivery in 2 to 3 weeks), please ask a Dynatect sales representative.

Gortiflex® Bellows:

For convoluted tubing from stock, see pages 26-27. For die set shields, see page 25.



CUSTOM ENGINEERED BELLOWS

CUSTOMIZED PROTECTION FOR EVERY APPLICATION...

Some applications require special materials or bellows constructions. Here are some common application requirements we take into consideration when customizing your bellows.



HIGH TEMPERATURE BELLOWS

High temperature bellows materials are used in applications where there is high ambient temperature or high temperature gas going through the bellows.



HEAVY CHIP LOADS

Heavy chip loads require a cover that can hold up to sharp chips and coolant. Several options will work in these applications, based on the cover travel requirements.



CHEMICAL OR COOLANT RESISTANT BELLOWS

Dynatect has unparalleled resources to select a suitable material that can withstand chemicals or coolants and processes that provide maximum durability.



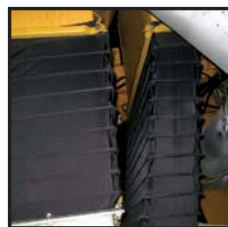
BELLOWS IN ABRASIVE ENVIRONMENTS

Abrasive environments from grinding, sanding, and other processes will require constructions that will survive in these difficult applications.



CLEAN ROOM BELLOWS

Manufacturing process and material options are available to provide bellows for a variety of clean room applications.



AIR DUCT BELLOWS

Before an air duct bellows is designed, the temperature, pressure, shear and environment must be properly defined.



BELLOWS EXPOSED TO WELD SPLATTER

Weld splatter and hot sparks from lasers, plasma cutting, or welding require either high temperature materials or metal-plated construction that will prevent the cover from being destroyed in the environment.



LIGHT-TIGHT BELLOWS FOR LASER BEAM PATH

Laser beam bellows need to be air and light-tight and capable to withstand high cycles and high-speed movement.



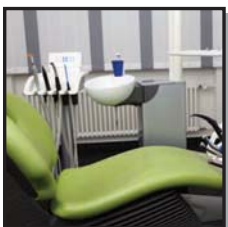
BELLOWS FOR OUTDOOR AND TRANSPORTATION ENVIRONMENTS

Outdoor applications require materials that will hold up in environments that include UV, temperature variations, dirt and dust, and exposure to liquids and ice.



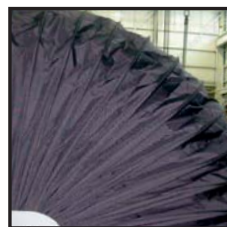
BELLOWS IN VERTICAL CONFIGURATION

Vertical applications can be solved with several bellows constructions dependent on environment or aesthetic requirements.



MECHANICAL AND MEDICAL LIFT COVERS

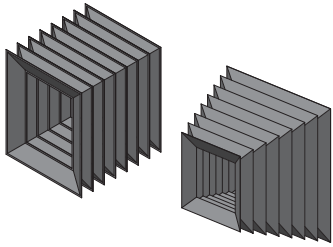
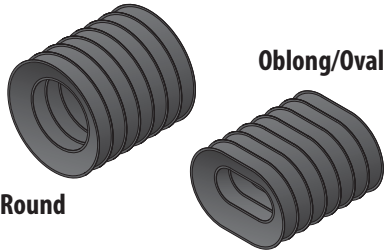
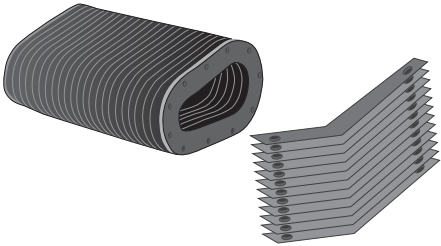
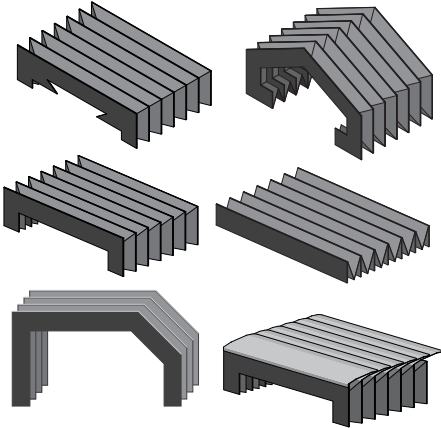
The environment and regulatory requirements will be considered to select a suitable material and process.



BELLOWS OPERATING IN SHEAR/TILT/LATERAL MOVEMENTS

Dynatect has several constructions that will work in applications requiring shear or tilt.

SELECTION GUIDE | BELLOWS BY SHAPE

SHAPE/BELLOWS PROFILE	BELLOWS CONSTRUCTIONS Configurable To Shape	TYPICAL APPLICATIONS
 <p>Square, Rectangular, or Tapered</p>	<ul style="list-style-type: none"> Folded Gorframe™* Gortiflex®* Heal-Sealed Liftgard™ Sewn Sewn-Folded Thermiseal Vulca Seal® <p><i>*Rounded corners</i></p> <p>Tapered Profile: Folded, Gortiflex, Sewn</p>	<ul style="list-style-type: none"> Laser bellows Air intake or exhaust manifolds Flexible air duct connections Cameras, imaging equipment Scissors mechanisms, lift tables Amusement ride base Tilt table Medical table
 <p>Round</p> <p>Oblong/Oval</p>	<ul style="list-style-type: none"> Gortiflex Sewn Thermiseal Vulca Seal 	<ul style="list-style-type: none"> Rod Boot Hydraulic cylinder cover Ball screw cover Pipe penetration seal Bellows-type expansion joint Air intake or exhaust manifolds Flexible air duct connections
 <p>Non-Standard/Special Shapes</p>	<ul style="list-style-type: none"> Folded Gorframe Gortiflex Sewn Thermiseal Vulca Seal 	<ul style="list-style-type: none"> Bus and light rail bellows Robotics Shift/joystick covers Seat covers Screen or aesthetic barrier
 <p>Way Cover (Flat/Strip-Type Screens and Variable Profiles with Legs)</p>	<ul style="list-style-type: none"> Folded Gordillo™ Gorframe Gortiflex Heat-Sealed Sewn Sewn-Folded Thermiseal Vulca Seal <p>Related Products</p> <ul style="list-style-type: none"> Gorplate™ Low Profile Stainless Steel Cover (see page 61) Telaflex® Steel Way Cover (see page 62) Roll-Up Covers (see pages 41-48) 	<ul style="list-style-type: none"> Machine ways Linear guide protection Screen or aesthetic barrier

QUOTE REQUEST FORM	SPECIFYING A BELLOWS
<ul style="list-style-type: none"> • Enclosed-Shape Bellows RFQ (see pages 30-31) 	<p>Bellows need to be specified accurately to perform reliably and maximize life. Beyond basic dimensions, operating conditions such as exposure, required movements, temperature and space restrictions should be taken into consideration. For example, covers for horizontally-oriented ball screws usually require internal guide plates.</p> <p>Our quote request forms have been divided into the following areas to assist you with your request:</p> <ul style="list-style-type: none"> • Type of application (component covered; cover orientation and direction of movement) • Operation requirements (ambient operating temperature, including periodic extremes; frequency and movement cycles/day; vacuum or pressure, when enclosed-shape bellows) • Environmental or special requirements (type and amount of liquids, oil or contaminants; application regulatory compliance standards) • Travel length of the bellows (required extended or maximum retracted length requirements; or, indicate travel and we will advise retracted length) • Dimensions (equipment dimensions or cover dimensions; any interference points along travel path, or space restrictions noted) • Mounting considerations (adapting the bellows ends to your mounting requirements; mounting accessories such as clamps, metal plates, hook and loop fastener, etc.)
<ul style="list-style-type: none"> • Enclosed-Shape Bellows RFQ (see pages 30-31) 	
<ul style="list-style-type: none"> • Not Available 	<p>Replacement Bellows</p> <p>If you are looking for a replacement of a bellows made by another manufacturer, send us a sketch of what you need covered or a drawing of your existing part. Please include a description of your operating environment so we can maximize the life of your replacement bellows.</p> <p>Some of our customers prefer to send their old bellows in to us to measure and quote. Just call or email us for a Return Material Authorization (RMA).</p>
<ul style="list-style-type: none"> • Bellows Way Covers RFQ (see pages 32-34) • Flat/Strip-Type Bellows RFQ (see page 38) • Gordillo Way Covers RFQ (Way cover with protective stainless steel plates) (see pages 36-37) 	<p>Our Quote Process</p> <p>Our quote request forms are designed to save you time by gathering information to design a custom bellows for your specific application requirements. You can also speak to application specialists over the phone to discuss any questions or concerns. Although our forms are comprehensive, there may be sections that are not applicable, especially if you already have a dimensional drawing.</p>

GORTIFLEX® MOLDED BELLWS

Gortiflex bellows are constructed from a tube of pure elastomer or elastomer-coated fabric, formed into a completely sealed cover. Internal and external supports can be provided for use at pressures up to 15 psi, depending on size. Gortiflex is available as any enclosed bellow shape, with numerous material options for standard and special applications.

Gortiflex Bellows Are Ideal For:

- No tooling fee for standard shapes (nominal tooling for special shapes)
- OEMs use for prototypes and production models

Features/Benefits:

- Exceptionally durable molded cover
- Neat appearance makes this cover ideal for aesthetics
- Excellent extended-to-retracted ratio for a molded cover
- Withstands moderate internal or external pressure
- Sealed construction resists moisture, liquid or chemical spray, contaminants and dirt
- Superior protection in outdoor environments with exposure to moisture, ice, sand, oil, temperature variations and ultra violet radiation

Materials:

- Materials available for temperature ranges of -100° F to 450° F
- Base elastomer materials: Neoprene (Chloroprene), Goralon® (Chlorosulphonated Polyethylene), nitrile, silicone, butyl, Viton, EPDM (Ethylene Propylene Diene Monomer)
- Optional support materials: Nylon, Kevlar®
- Special material options: Neoprene available as flame retardant (FR), food grade (FG) or low-temperature rating

Applications:

- Rod/ball screw covers
- Expansion joints
- Piping penetration seals
- Compressor and engine intake and exhaust manifold connections
- Fan duct connections
- Food processing



STANDARD SIZES

Limited sizes of round bellows are available from stock. See pages 26-27 for full details.

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SEWN BELLOWS

Gortite® brand sewn bellows have been the standard solution for machine tool protection for many decades. They are manufactured from heavy-duty elastomer-coated fabric stitched with nylon or specialty thread. A liquid elastomer coating can be added to seams for greater life in severe applications by reducing the thread exposure to the environment, or to limit liquid. Sewn bellows are not liquid or air-tight, however, Dynatect offers several alternative bellows constructions that are suitable for these requirements. Sewn bellows are the most versatile when it comes to shape and size: any size or shape is possible – round, oval, rectangular, strip-type, way cover and more.

Features/Benefits:

- Low cost protection from dust, dirt and other contaminants
- Flexible process – almost any size and configuration can be sewn
- Widest material selection available
- No tooling costs
- Economical even in low quantities
- Round, sewn bellows can ship within 1 business day using our expedited ordering system

Materials:

- Aluminized fiberglass (high ambient temperature, weld splatter, hot chips)
- Buna/Nylon (coolant/oil resistance)
- Goralon® (CSM)
- Neoprene/Nylon (general purpose, oil resistance)
- Silicone-coated fiberglass (high ambient temperature, high cycle durability)
- PTFE fiberglass (high temperature, weld splatter, hot chips)
- Specialty: Materials are also available for use with fire resistant hydraulic fluids, expanded temperature ranges and other special application requirements

Applications:

- Way and linear rail covers
- Rod boots, ball screw covers
- Pneumatic and hydraulic cylinder covers



STANDARD SIZES

Limited sizes of round bellows are available from stock. See pages 28-29 for full details.

HEAT SEALED BELLWS

Heat sealed bellows are manufactured from a single sheet of thermoplastic-coated fabric, which is pleated and then thermically welded to a PVC stiffener at every fold. Typically used as a bellows-type way cover, they are available in any flat-sided, non-circular form.

Features/Benefits:

- No stitch holes, seams or breaks
- Uniform cover shape is maintained throughout range of motion
- Stiffener profile can be made to match any way or rail geometry
- Attractive, clean, uniform appearance
- Excellent protection for linear bearings and other precision equipment
- Ideal for applications requiring very large or rigid covers
- Cover retains shape throughout travel
- Can be fabricated with metal plates attached to each convolution (see Gordillo™)

Materials:

- Lasertex (Pre-oxidized Kevlar®)
- Polyurethane/Kevlar
- Polyurethane/polyester
- Polyurethane/polyester-conductive
- PTFE/polyester/polyurethane
- PVC/polyester

Applications:

- Way covers: light- to medium-duty environments, e.g., small particles, light abrasives, light oil, occasional large chips, liquids



GORDILLO STAINLESS-STEEL-CLAD BELLWS

A Gordillo is a sewn-folded or heat sealed way cover made with stainless steel plates covering each convolution. It is available in any flat sided form. The stainless steel plates shield the bellows from damaging hot chips and hot sparks, which would quickly damage a conventional bellows. A convenient option where there is not enough space for a telescoping steel way cover.

Features/Benefits:

- Added protection against hot chip loads and weld splatter
- Greater resistance than standard fabric bellows
- Smaller footprint and extended-to-retracted ratio versus telescoping covers

Materials:

- Plates: Gordillo plates are made from stainless steel
- Bellows: Refer to heat-sealed or sewn-folded constructions for materials

Applications:

- Vertical, horizontal or cross-rail protection for machine components and ways
- Medium- to heavy-duty operating conditions that would quickly damage a traditional bellows: weld splatter, heavy chip loads, abrasives, and hot sparks



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SEWN-FOLDED BELLOWS

Sewn-folded bellows are manufactured from a single sheet of thermoplastic-coated or elastomer-coated fabric, which is pleated and then sewn to a PVC stiffener at every fold. Typically used as a bellows-type way cover, they are available in any flat-sided, non-circular form.

Features/Benefits:

- Cover shape is maintained throughout range of motion
- Stiffener profile can be made to match any way or rail geometry
- Excellent protection for linear bearings and other precision equipment
- Ideal for applications requiring very large or rigid covers
- Diverse material selection – we are able to use thermoset elastomer coated materials that cannot be welded

Materials:

- Aluminized/polyester
- CSM (Goralex®)/polyester
- Neoprene/nylon (general purpose, oil resistance)

Applications:

- Way covers: light- to medium-duty environments, e.g., small particles, light abrasives, light oil, occasional large chips, liquids



FOLDED BELLOWS

Folded bellows are often used in applications requiring the cover to be completely sealed and light-proof, such as laser bellows. These covers can also be used in applications requiring bellows to be able to handle internal or external pressure and motion. Folded covers can be constructed out of elastomer or thermoplastic materials. Square or rectangular designs can be tapered, including offset configurations. Folded bellows are available as an enclosed-shape bellow in any flat-sided form. An alternative, lower cost option is a single-layer folded construction, made from thermoplastic film.

Features/Benefits:

- Completely sealed from light, air and dirt penetration
- High durability – can withstand high cycles and high-speed movement
- No tooling charges

Materials:

- Aluminized/polyester
- Buna/nylon food grade
- CSM (Goralex®)/polyester
- Neoprene/nylon (general purpose, oil resistance)
- Polyurethane/ballistic polyester

Applications:

- Laser beam paths, air ducts, cameras, copy machines, enlargers, imaging equipment



THERMISEAL BELLOWS

Thermiseal bellows are made from thermoplastics bonded together by thermic weld process. The result is a lightweight, completely sealed cover. When additional strength is needed, nylon-reinforced fabric can be used. Available in any size or shape (e.g. round, oval, rectangular, strip-type, way cover). Tooling charges for new designs may apply.

Features/Benefits:

- Attractive, clean, uniform appearance – great as an aesthetic cover to conceal mechanical components
- Excellent extended to retracted ratio
- Generates minimal airborne particles
- Air, dust and liquid tight
- Can withstand high cycles and high-speed movement
- Lightweight construction and superior extended to retracted ratio is ideal for covering sensitive measuring equipment

Materials:

- Polyurethane films and polyurethane coated fabrics

Applications:

- Medical equipment
- Semi-conductor equipment
- Inspection and test equipment
- Clean room environments



VULCA SEAL® BELLOWS

Vulca Seal is made from separate sections and then joined by vulcanizing alternating seams to form convolutions, resulting a completely sealed cover without stitch holes, seams or breaks. Available in any size or shape (e.g. round, oval, rectangular, strip-type, way cover). Sealed PTFE is available for harsh environments such as chemicals, coolants and high temperatures up to 500° F.

Features/Benefits:

- Extreme durability – long life in abrasive environments
- Withstands moderate internal or external pressure
- No tooling fee – ideal for OEM use on both prototype models and new designs
- Attractive, clean, uniform appearance – great as an aesthetic cover to conceal mechanical components
- Custom designed to match any rail or way profile

Materials:

- Goralon® (CSM), PTFE

Applications:

- Way and linear rail covers
- Rod boots, ball screw covers
- Medium- to heavy-duty environments: abrasives, chip loads, weld splatter, hot sparks, chemicals, coolants, high temperatures



STANDARD OPTIONS AND ACCESSORIES | ENCLOSED BELLOWS



Breather Vents – For breathing in sealed covers.



Grommets – For use with supports or guide rods.



Tie Strips – To limit cover stretch.



Wire Guides, Internal or External – To maintain shape in sealed covers experiencing internal pressure or vacuum.



Internal Guides (inserts) – For ball screw applications.



Zipper – For easy installation without disassembling machine parts.

Mounting Accessories

- Clamps, back-up plates and hook & loop fastener

ROBUST BELLOWS | HIGH TEMPERATURE

Robust bellows are characterized by a long service life and high tensile strength. The robust bellows is especially designed for high temperatures and aggressive operating conditions. They perform reliably in harsh environments to protect your equipment. In addition to contact and radiant heat resistance, the key benefits of Robust bellows: high tear strength, extreme durability, and a material selection for chemical, UV and ozone resistance.

Features/Benefits:

- High temperature resistance to up to 900° C radiant heat
- Resistance to acid and basic chemicals
- UV/Ozone resistance
- Extreme durability and tear strength
- Optional PTFE coating to inside or outside of bellows

Applications:

- Industrial plant equipment
- Automotive industry
- Printing equipment
- Ball screw or piston rod cover

Materials:*

CR-Rubber/Fabric

- Chloroprene (also known as Neoprene), with cotton fabric base
- Temperature range: -20° C to +110° C (-4° to 230° F)
- Optional coating: PTFE inside and/or outside
- Thicknesses: 0.5 mm to 3.0 mm

Aluminized Carbon Fiber

- Carbon fabric with aluminum coating on one side
- Temperature range:
 - radiant heat up to 900° C (1,652° F)
 - contact heat up to 200° C (392° F)
- Optional coating: PTFE inside and/or outside
- Thicknesses: 0.45 mm or 1.0 mm



Aluminized Kevlar®

- Kevlar fabric with aluminum coating on one side
- Temperature range:
 - radiant heat up to 900° C (1,652° F)
 - contact heat up to 200° C (392° F)
- Optional coating: PTFE inside and/or outside
- Thickness: 1.0 mm

Fiberglass

- Green color, uncoated fiberglass
- Temperature range:
 - radiant heat up to 700° C (1,292° F)
 - contact heat up to 800° C (1,472° F)
- Optional coating: PTFE inside and/or outside
- Thickness: 1.0 mm

*Leather is available for special sewn applications, available upon request. It is not meant for high temperature applications. Thicknesses: 1.0 mm and 2.0 mm.

Robust bellows are made in our European manufacturing facility in Bielefeld, Germany.

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MOLDED BELLOWS | MULTIFLEX DIP-MOLDED

Multiflex bellows are produced using a dip molding process, resulting in a neat, clean-looking bellows. We develop precise aluminum forms in-house to ensure a flexible, fast and precise solution. This process is suitable for up to 5,000 pieces. Dip-molded bellows are available in almost any geometry and with single or two-color immersion. Black, grey and white PVC plastisol are the most common selections; additional colors are available for high volume production runs.

The thermoplastic has good UV- and ozone-resistance, oil- and grease-resistance and even food-grade compatibility. Operating temperature range is -30° C to +80° C. The bellows can be immersed to create defined hard- and soft areas upon special request. Most prototype tools can be produced in one week, with delivery of first sample within two weeks. Many mounting configurations are available, including flanges and collars.



Features/Benefits:

- Available in almost any geometry
- Neat, clean appearance with many color options
- Low cost tooling and low cost per bellows
- Speedy prototype tooling and sample delivery
- Seamless protection against water, oil and other contaminants
- Excellent UV and ozone resistance
- Suitable for special applications such as food grade and clean room

Applications:

Multiflex bellows protect mechanical components from dust, water, mineral oil and other contaminants. Multiflex is used in numerous applications:

- Clean-room environments
- Medical, robotics and automation applications
- Joint covers
- Joystick/shift covers

Multiflex dip-molded bellows are made in our European manufacturing facility in Bielefeld, Germany.

GORFRAME™ WIREFRAME

Gorframe wireframe bellows are used in applications involving lateral (shear) movement, washdown, clean room, or where materials must meet special requirements. Its rugged, flexible design uses internal or external wires to maintain the shape of the bellows. The Gorframe cover is available in multiple shapes: a four-sided cover with rounded corners, three-sided "clamshell"-style cover, or a round-shaped cover.



Features/Benefits:

- Designed to withstand a range of motion in a variety of directions, including lateral (shear) movement
- Ideal for concealing operational mechanisms, as a lift/tilt table cover
- Wide range of materials available, including specialty materials: some that meet UL burn standards or incorporate anti-microbial agents
- Small retracted length allows cover to retract into a tight space

Materials:

- Aluminized fiberglass (high temperature, weld splatter, hot chips)
- Aluminized Kevlar® (high temperatures)
- Ballistic nylon (high durability against abrasion and tears)
- Goralon®/polyester (chemical/UV/ozone resistance)
- Neoprene/nylon (oil resistance)
- Neoprene/polyester-FR (non-conductive, fire retardant)
- Urethane/preoxidized Kevlar (spark resistance, weld splatter resistance)
- Urethane-polyester (antimicrobial, fire retardant, grey and black color options)
- Vinyl/nylon (color options available)
- Vinyl/polyester (washdown environments)

Applications:

- Enclosing bases of medical tables, imaging tables, dental chairs and amusement rides
- Flexible, "clamshell" style cover for light-duty protection in machine tool environments

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LIFTGARD™* LIFT TABLE COVER

The Liftgard is designed to cover scissors/lift tables. Its innovative, cost-effective design provides significant advantages over the traditional stitched covers that utilize steel rods which must be inserted into the fabric. Precision engineered aluminum extrusions are shaped to provide structure and strength to a durable, folded material. The standard design is equipped with vented corners and a zipper, however, the design can be modified as needed for moisture concerns.

Features/Benefits:

- Reduced assembly time and freight cost: pre-assembled covers are folded for shipping, then easily unfolded for assembly – this reduces assembly time by eliminating the need to insert steel rods
- Smooth operation: corner venting optimized to accommodate rapidly rising and descending lifts
- Strong structure without steel rods: aluminum frame provides a stiffer, more supportive structure than typical steel rod configuration – eliminates rusty metal rods protruding from cover ends
- End mounting configuration: standard flange/ inside collar; alternative options available

Materials:

- Standard material: 18 oz. yellow PVC/nylon, 0.021" nominal thickness, with black corners
- Custom materials available for special applications; several color options available

Applications:

- Enclosing the bases of lift tables, tilt tables or scissors lift mechanisms
- Aesthetic cover for concealing operational components
- Ideal for large enclosed-type cover applications
- If a more sealed cover is required such as in a washdown application, covers can be manufactured without vents or zipper. In this case, customer should provide alternative cover venting.

*Patent Pending.



BELLOWS | TRANSPORTATION

This design is specialized for the ventilation of traction motors on electric locomotives and railcars. The bellows serve as an integral part of the cooling air flow as a flexible connecting element between traction motor blower and drive motor. They are fixed from the bottom of the underfloor area of the locomotive to the upper flange of the traction motor fan collar. A seal is provided between the upper flange and the traction motor fan collar in order to prevent loss of air and to prevent moisture ingress. The lower part of the bellows will normally be fixed to the bottom flange of the traction motor or fastened with a bayonet fitting. Other mounting options are available.

Features/Benefits:

- Air and water proof vulcanized endless tubing
- Material: silicone-coated Meta-aramid (pink)
- Dimensional stability assured by stainless steel wire rings inside the convolution peaks
- Bellows convolutions are secured by protection profiles
- Mounting using custom made metal or silicone flanges



Made in our European manufacturing facility in Bielefeld, Germany.

GORTIFLEX® DIE SET SHIELDS | STOCK

Gortiflex die set shields are unique molded bellows covers packaged conveniently for easy ordering and fast shipment within 1 or 2 business days. Bellows protect ball bushings or standard die sets to lengthen life and increase operator safety. Die shields are available in 7 sizes to cover pins from 3/4" to 2-1/2" diameter. Die set shields are manufactured from heavy-duty, oil-resistant, Goralon® material. Each set consists of 2 bellows, 2 clamps and 2 back-up plates for quick and easy installation.

Features/Benefits:

- Durable construction provides long-life operation, even in high-speed die set applications
- Completely seals out damaging dirt, dust, scrap and scale
- Lengthens die set life
- Provides increased operator safety
- Delivered with back up mounting plate and clamp for a complete solution

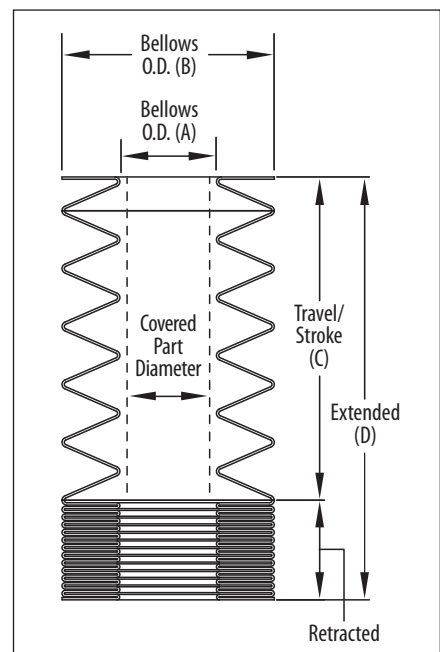


STYLES

PIN DIAMETER	STANDARD FRICTION SHOULDER BEARINGS		BALL BUSHING BEARINGS	
	SHOULDER	SLEEVE	SHOULDER	SHOULDER
3/4", 7/8"	DSA	DSA	—	DSA
1", 1-1/8"	DSB	DSA	DSC	DSB
1-1/4"	DSC	DSB	DSD	DSD
1-1/2"	DSD	DSC	DSE	DSE
1-3/4"	DSE	DSD	DSF	DSE
2"	DSF	DSE	DSG	DSF
2-1/2"	DSG	DSF	—	DSG

DIMENSIONS

DIE SET SHIELD STYLE	A (I.D.)	B (O.D.)	C (MAX. LENGTH)	D (MIN. LENGTH)	E (COLLAR I.D. RANGE)
DSA	1-1/2"	2-1/2"	11"	1-1/2"	1-3/8" to 1-5/8"
DSA-18	1-1/2"	2-1/2"	18"	3"	1-3/8" to 1-5/8"
DSB	1-3/4"	2-3/4"	11"	1-1/2"	1-5/8" to 1-7/8"
DSB-18	1-3/4"	2-3/4"	18"	3"	1-5/8" to 1-7/8"
DSC	2"	3"	11"	1-1/2"	1-7/8" to 2"
DSC-18	2"	3"	18"	3"	1-7/8" to 2"
DSD	2-1/4"	3-1/4"	11"	1-1/2"	2-1/8" to 2-3/8"
DSD-18	2-1/4"	3-1/4"	18"	3"	2-1/8" to 2-3/8"
DSE	2-3/4"	3-3/4"	11"	1-1/2"	2-1/2" to 2-3/4"
DSE-18	2-3/4"	3-3/4"	18"	3"	2-1/2" to 2-3/4"
DSF	3"	4"	11"	1-1/2"	2-7/8" to 3-1/8"
DSF-18	3"	4"	18"	3"	2-7/8" to 3-1/8"
DSG	3-1/2"	4-1/2"	11"	1-1/2"	3-3/8" to 3-5/8"
DSG-18	3-1/2"	4-1/2"	18"	3"	3-3/8" to 3-5/8"



Please supply the following information to order:

1. Style number
2. Pin diameter of die set
3. Type of bearing used on die set: standard friction, shoulder, ball bushing or sleeve

GORTIFLEX® CONVOLUTED TUBING | STOCK

Gortiflex convoluted tubing can be used as covers for screws, rods, ball splines. They can also be applied as flexible connections where vibration, movement or misalignment is involved. Available from stock, shipment within 1-2 business days.

CT STYLE

- For light- to medium-duty environments (oil, dirt, chips and other abrasives)
- Chemical and UV resistance
- Operating temperature range: -30° F to 260° F*
- Available in 13 stock sizes, from 1 to 10 inch I.D. and 24" extended lengths
- CT units are made from 0.060" thick (+/- 0.010") Goralon® elastomer reinforced with outer nylon stocking
- Ends consist of a 1" long collar on each end for mounting with optional clamps (collars can be removed to provide flanges)
- Easy mounting with clamps, stocked in all sizes (clamp band width is ½ inch)



CTH STYLE

- For light-duty environments (oil and dust)
- Chemical and UV resistance
- Operating temperature range: -30° F to 260° F*
- Available in 6 stock sizes from 0.75 to 2 inch I.D. and extended lengths of 12" or 24"
- CTH units are made from 0.030" thick (+/- 0.05") Goralon elastomer
- Inside flanges on both ends of the bellows accept a snap-in collar to achieve the desired connecting I.D. Snap-in collars are black polyurethane, ¾ inch long, available in a variety of sizes
- Easy mounting with clamps, stocked in all sizes (clamp band width is ½ inch)



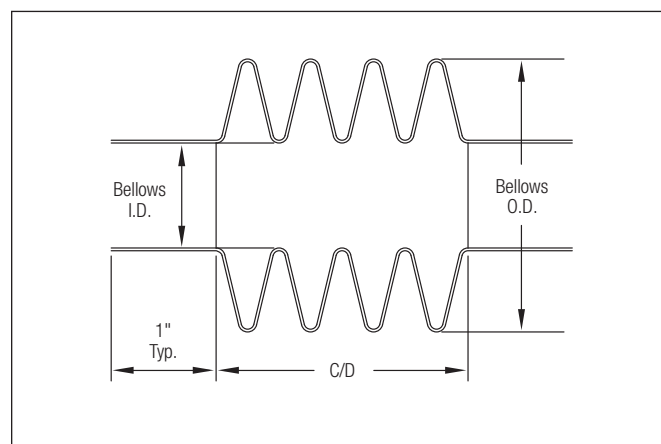
*Temperatures represent operating ranges for compounds in laboratory tests. Operating temperature range for Goralon in a bellows application may vary dependent on other environmental conditions. Consult Dynatect for assistance in product specification.

GORTIFLEX® CONVOLUTED TUBING | STOCK

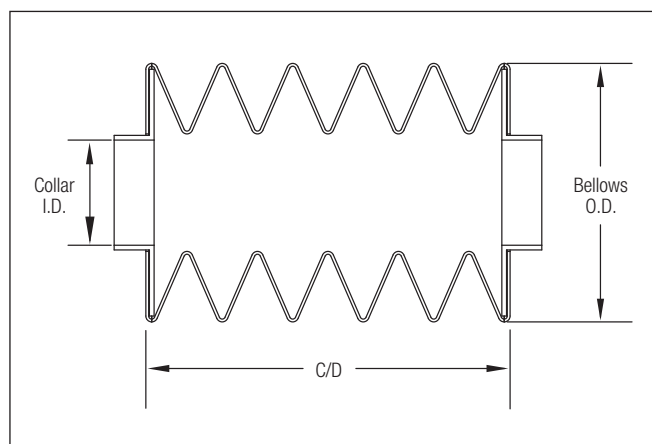
DIMENSIONS

STYLE NUMBER	BELLOWS I.D.	BELLOWS O.D.	EXTENDED LENGTH	RETRACTED LENGTH	SNAP-IN COLLAR SIZES (I.D.) AVAILABLE
CTH-.75-12	3/4"	1-5/8"	12"	1-7/8"	1/4", 1/2", 3/4", 1"
CTH-.75-24	3/4"	1-5/8"	24"	3-3/4"	1/4", 1/2", 3/4", 1"
CTH-1.375-12	1-3/8"	2-1/2"	12"	1-3/8"	1/2", 3/4", 1", 1-1/4", 1-1/2", 1-3/4"
CTH-1.375-24	1-3/8"	2-1/2"	24"	2-3/4"	1/2", 3/4", 1", 1-1/4", 1-1/2", 1-3/4"
CTH-2-12	2"	3-1/4"	12"	1"	1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/4"
CTH-2-24	2"	3-1/4"	24"	2"	1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/4"
CT-1	1"	1-3/4"	24"	5-1/4"	—
CT-1.5	1-1/2"	2-3/8"	24"	4-1/2"	—
CT-2	2"	3"	24"	4"	—
CT-2.5	2-1/2"	3-1/2"	24"	4"	—
CT-3	3"	4-1/4"	24"	3-1/4"	—
CT-3.5	3-1/2"	5"	24"	3"	—
CT-4	4"	5-1/2"	24"	3"	—
CT-4.5	4-1/2"	6"	24"	3"	—
CT-5	5"	6-3/4"	24"	2-1/2"	—
CT-6	6"	8"	24"	2-1/4"	—
CT-7	7"	9"	24"	2-1/4"	—
CT-8	8"	10"	24"	2-1/4"	—
CT-10	10"	12"	24"	2-1/4"	—

CT STYLE



CTH STYLE



Please supply the following information to order:

1. New design or replacing existing bellows
2. CT/CTH Style number
3. Snap-in collar dimensions I.D. for each end (CTH style only)
4. If optional mounting clamps are desired



Mounting Clamps

STOCK ROD BOOTS | STANDARD SEWN BELLOWS

Gortite® sewn bellows provide maximum protection against cylinder rod scoring from chips, abrasive particles and other impinging objects. Units are manufactured of rugged neoprene coated nylon fabric. Gortite sewn cylinder rod bellows are suitable for operating temperature ranges of -40° F to 220° F. Rod boots are available in 12 stock sizes without tooling charges or minimum order quantities. All shipments are made within three working days.



Features/Benefits:

- Reduce frequency of shaft seal replacements
- Prevent rod scoring
- Eliminate nicking of shafts and ball screws
- Protect against impinging chips
- Guard against grit abrasion
- Shield from corrosive splatter

Applications:

- Cylinder rod boots
- Dust boots

SPECIFICATIONS

ROD BOOT STYLE	I.D. (Inside Diameter)	O.D. (Outside Diameter)	RETRACTED LENGTH (every 12" extended)	COLLARS: AVAILABLE I.D. SIZES (must be ordered in 1/8" increments)
SRA-15	3/4"	3"	3/4"	1/2" to 3"
SRB-15	1-1/8"	3-3/8"	3/4"	1/2" to 3-3/8"
SRC-15	1-1/2"	3-3/4"	3/4"	1/2" to 3-3/4"
SRD-15	1-7/8"	4-1/8"	3/4"	1/2" to 4-1/8"
SRE-15	2-3/8"	4-5/8"	3/4"	1/2" to 4-5/8"
SRF-15	2-7/8"	5-1/8"	3/4"	1/2" to 5-1/8"
SRG-25	3-3/8"	7"	1/2"	1/2" to 7"
SRH-25	3-7/8"	7-1/2"	1/2"	1/2" to 7-1/2"
SRJ-25	4-1/2"	8-1/4"	1/2"	1/2" to 8-1/4"
SRK-25	5"	8-3/8"	1/2"	1/2" to 8-3/8"
SRM-25	5-3/8"	9-1/2"	1/2"	1/2" to 9-1/2"
SRO-25	7-1/4"	11"	1/2"	1/2" to 11"

Mounting Accessories

- C205 flange-type back up plates or C208 collar clamps – can be added to your order upon request.



STOCK ROD BOOTS | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

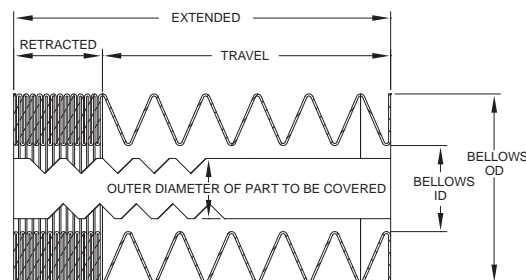
1. Rod Boot Style

- ☐ SRA-15 ☐ SRB-15 ☐ SRC-15 ☐ SRD-15 ☐ SRE-15 ☐ SRF-15
☐ SRG-25 ☐ SRH-25 ☐ SRJ-25 ☐ SRK-25 ☐ SRM-25 ☐ SRO-25

ROD BOOT STYLE	I.D. (Inside Diameter)	O.D. (Outside Diameter)	RETRACTED LENGTH (every 12" extended)	COLLARS: AVAILABLE I.D. SIZES (must be ordered in 1/8" increments)
SRA-15	3/4"	3"	3/4"	1/2" to 3"
SRB-15	1-1/8"	3-3/8"	3/4"	1/2" to 3-3/8"
SRC-15	1-1/2"	3-3/4"	3/4"	1/2" to 3-3/4"
SRD-15	1-7/8"	4-1/8"	3/4"	1/2" to 4-1/8"
SRE-15	2-3/8"	4-5/8"	3/4"	1/2" to 4-5/8"
SRF-15	2-7/8"	5-1/8"	3/4"	1/2" to 5-1/8"
SRG-25	3-3/8"	7"	1/2"	1/2" to 7"
SRH-25	3-7/8"	7-1/2"	1/2"	1/2" to 7-1/2"
SRJ-25	4-1/2"	8-1/4"	1/2"	1/2" to 8-1/4"
SRK-25	5"	8-3/8"	1/2"	1/2" to 8-3/8"
SRM-25	5-3/8"	9-1/2"	1/2"	1/2" to 9-1/2"
SRO-25	7-1/4"	11"	1/2"	1/2" to 11"

2. Rod Boot Dimensions (please specify in inches)

O.D. (outer diameter) of part to be covered: _____
 Extended length: _____ (without ends, in 12" increments)
 Travel distance: _____



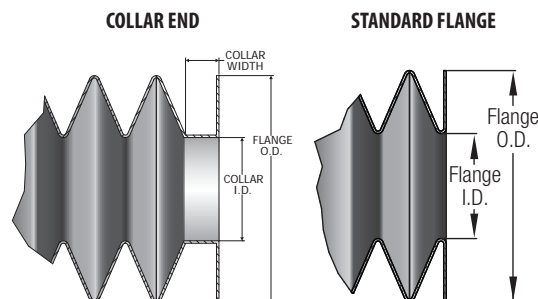
3. End Dimensions (choose end type for each end – standard flange or collar)

One End: ☐ Standard Flange
 Outer Diameter: _____ Inner Diameter: _____

☐ Collar
 Outer Diameter: _____ Width: _____

Other End: ☐ Standard Flange
 Outer Diameter: _____ Inner Diameter: _____

☐ Collar
 Outer Diameter: _____ Width: _____



4. Mounting Accessories (please check options desired)

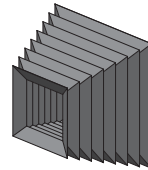
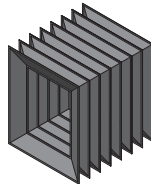
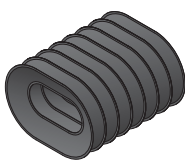
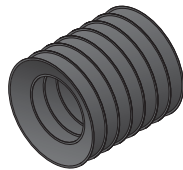
- ☐ C208 Clamp (0.5" minimum inner diameter) – C208 Clamps are stocked in any size required; clamp band is 0.5" wide
☐ C205 Flange-type back-up plate (shipped blank)
☐ C205 Flange-type back-up plate with mounting holes (please send sketch indicating bolt hole pattern)

ENCLOSED-SHAPE BELLOWS | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

1. Application Information

New or Replacement Application: ☐ New Design ☐ Replacement
 Protection For: ☐ Cylinder rod/ram ☐ Rod with ball bushing ☐ Ball screw ☐ Acme screw ☐ Spline ☐ Rectangular-shaped part
☐ Other (describe or send drawing) _____
 Cover Orientation: ☐ Horizontal ☐ Vertical
 Construction Preference: ☐ Dynatect Recommendation ☐ Gortiflex®-Molded ☐ Sewn ☐ Vulca-Seal® ☐ Thermiseal ☐ Folded
 Cover Profile Shape: ☐ Round ☐ Oval* ☐ Rectangular/Square ☐ Tapered* ☐ Other/Custom



*Drawing required; PDF or DWG/DXF file preferred.

2. Operation Information

Continuous (ambient) Temperature: _____ °F °C
 Intermittent Temperature Range: Min. _____ Max. _____
 Frequency of Exposure: _____
 Distance from Heat Source (if applicable)*: _____
 Maximum Travel Speed*: _____ Movements/Day _____
 Acceleration*: _____
☐ Pressure _____ PSI ☐ Bellows cycles under pressure
☐ Vacuum _____ PSI ☐ Bellows cycles under pressure

*Please indicate unit of measurement for each value.

3. Environmental Information

Heat Exposure: ☐ Weld Splatter ☐ Hot Chips/Swarf ☐ High Ambient Temperature (specify in "Operation Information")
 Abrasion Exposure: ☐ Metal Chips/Swarf ☐ Wood Chips/Shavings ☐ Light Particles/Dust ☐ Other _____
 Chemical or Liquid Exposure: ☐ Water ☐ Moisture ☐ Salt or Sea Spray ☐ Petroleum/Hydrocarbons ☐ Oils (non-petroleum)
☐ Hydraulic Fluid (petroleum-based) ☐ Hydraulic Fluid (phosphate ester-based)
☐ Acid ☐ Coolant ☐ Cutting Fluid
☐ Other (specify) _____
 Contaminant Exposure Level: ☐ Minimal ☐ Occasional ☐ Heavy
 Miscellaneous: ☐ UV/Ozone ☐ Outdoors ☐ Food-Grade/FDA ☐ Laser Beam ☐ Clean Room ☐ Camera/Light-Proof
☐ Other (specify) _____
 Regulatory Compliance: Standard _____ ☐ Bellows must be fire retardant (list standard to the left)
 Application Notes: _____

ENCLOSED-SHAPE BELLOWS | QUOTE REQUEST FORM

4. Cover Dimensions

For round shapes, specify diameter. For rectangular shapes, please specify height and width dimensions.

Dimensions specified in: ☐ in ☐ mm

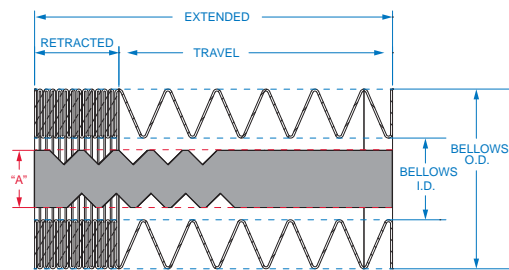
Covered Part Dimensions: Diameter: _____ or 4-sided: _____ x _____

Bellows I.D.:

(must be greater than dimensions(s) listed above;
if left blank, we will determine the proper clearance)

Diameter: _____ or 4-sided: _____ x _____

Maximum Allowable Bellows O.D.: Diameter: _____ or 4-sided: _____ x _____



O.D. = Outside Diameter (round) or Outside Dimensions (rectangular)

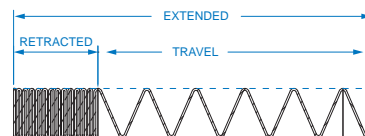
I.D. = Inside Diameter (round) or Inside Dimensions (rectangular)

5. Extended/Retracted/Travel Requirements

Specify extended and retracted length requirements, or indicate travel and we will advise retracted length. (Extended length = retracted length + travel)

Dimensions specified in: ☐ in ☐ mm

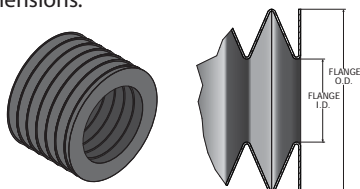
Extended Length: _____ Retracted Length: _____ Travel Distance: _____



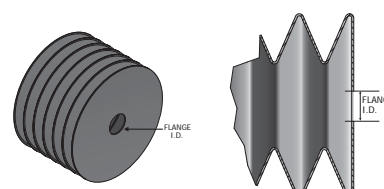
6. End Dimensions

Specify a type along with relevant dimensions for each end. For round shapes, specify diameter. For rectangular shapes, please specify height and width dimensions.

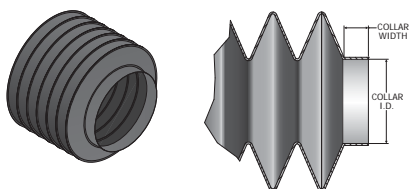
STANDARD FLANGE



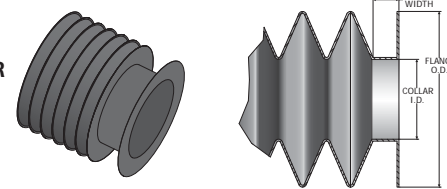
INSIDE FLANGE



COLLAR



FLANGE-TYPE COLLAR



End 1 Type:

- ☐ Standard Flange
☐ Inside Flange
☐ Collar
☐ Flange-Type Collar

Flange O.D.: _____ or 4-sided: _____ x _____

Flange I.D.: _____ or 4-sided: _____ x _____

Collar I.D.: _____ or 4-sided: _____ x _____

Collar Width: _____ or 4-sided: _____ x _____

End 1 Mounting:

- ☐ Mounting Hole Pattern*
☐ Mounting Plate**
☐ Clamp†

End 2 Type:

- ☐ Standard Flange
☐ Inside Flange
☐ Collar
☐ Flange-Type Collar

Flange O.D.: _____ or 4-sided: _____ x _____

Flange I.D.: _____ or 4-sided: _____ x _____

Collar I.D.: _____ or 4-sided: _____ x _____

Collar Width: _____ or 4-sided: _____ x _____

End 2 Mounting:

- ☐ Mounting Hole Pattern*
☐ Mounting Plate**
☐ Clamp†

7. Bellows Accessories

☐ Zipper ☐ Inside Wires ☐ Outside Wires ☐ Tie Strips ☐ Internal Support Guides‡ ☐ Outer Grommets for Support Rod ☐ Breather Vents

*Drawing required. **Shipped blank unless hole pattern specified; drawing required.

†0.5" I.D. minimum. Clamps are stocked in any size required. Clamp band is 0.5" wide. ‡Recommended for screw covers.

BELLOWS WAY COVER | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

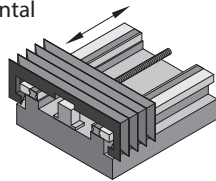
1. Application Information (Please supply a sketch/drawing/CAD file (DWG or DXF file format)/photo of your application.)

New Design or Replace Existing Cover: ☐ New cover design (only fill out pages 32 and 33)
☐ Replace existing cover (only fill out pages 32 and 34)

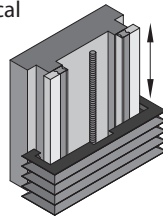
Describe the type of equipment or part you need to cover: _____

Machine Make: _____ Machine Model: _____

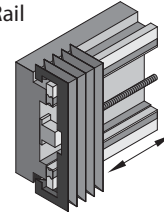
Cover Orientation: ☐ Horizontal



☐ Vertical



☐ Cross Rail



Construction Preference: ☐ Dynatect Recommendation ☐ Heat-Sealed ☐ Sewn ☐ Vulca-Seal® ☐ Sewn/Folded

2. Operation Information

Continuous (ambient) Temperature: _____ °F °C Intermittent Temperature Range: Min. _____ Max. _____ °F °C

Frequency of Exposure: _____ Distance from Heat Source (if applicable)*: _____

Maximum Travel Speed*: _____ Movements/Day _____ Acceleration*: _____

*Please indicate unit of measurement for each value.

3. Environmental Information

Heat Exposure: ☐ Weld Splatter ☐ Hot Chips/Swarf ☐ High Ambient Temperature (specify in "Operation Information")

Abrasion Exposure: ☐ Metal Chips/Swarf ☐ Wood Chips/Shavings ☐ Light Particles/Dust ☐ Other _____

Chemical or Liquid Exposure: ☐ Water ☐ Moisture ☐ Salt or Sea Spray ☐ Petroleum/Hydrocarbons ☐ Oils (non-petroleum)
☐ Hydraulic Fluid (petroleum-based) ☐ Hydraulic Fluid (phosphate ester-based)
☐ Acid ☐ Coolant ☐ Cutting Fluid
☐ Other (specify) _____

Contaminant Exposure Level: ☐ Minimal ☐ Occasional ☐ Heavy

Miscellaneous: ☐ UV/Ozone ☐ Outdoors ☐ Food-Grade/FDA ☐ Laser Beam ☐ Clean Room ☐ Other (specify) _____

Regulatory Compliance: Standard _____ ☐ Bellows must be fire retardant (list standard to the left)

Application Notes: _____

4. Extended/Retracted/Travel Requirements

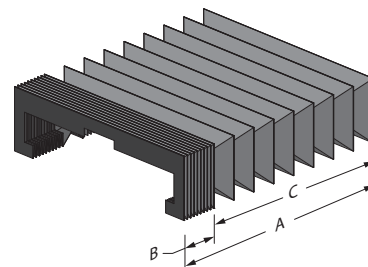
Specify extended and retracted length requirements, or indicate travel and we will advise retracted length. (Extended length = retracted length + travel distance)

Dimensions specified in: ☐ in ☐ mm

(A) Extended Length: _____

(B) Retracted Length: _____

(C) Travel Distance: _____



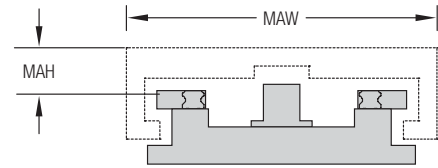
BELLOWS WAY COVER –NEW DESIGN | QUOTE REQUEST FORM

1. Maximum Allowable Cover Width and Height Above Way

Dimensions specified in: ☐ in ☐ mm

MAH (Maximum Allowable Height Above Way) Required: _____

MAW (Maximum Allowable Cover Width) Required: _____



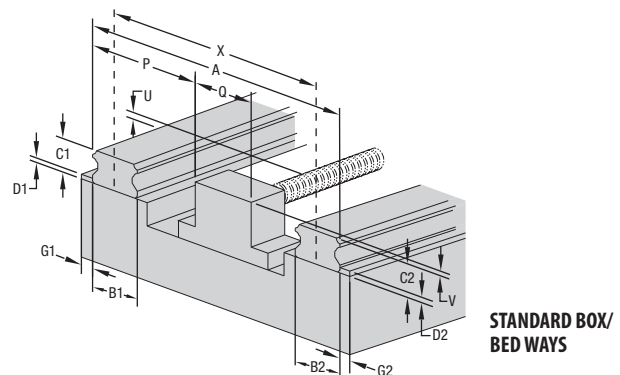
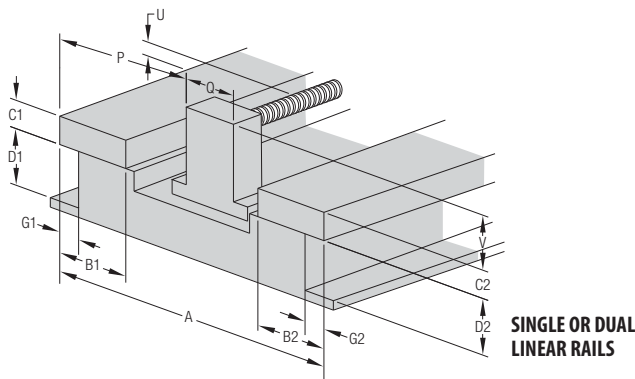
2. Way Dimensions

Single or dual linear rails – see left diagram below and specify rail type and model. Standard box/bed ways – see right diagram below. If the way does not resemble the way profiles shown below, please send a sketch/drawing of your actual way dimensions. Be sure to note any space restrictions; reference “Maximum Allowable Cover Width And Height Above Way” above.

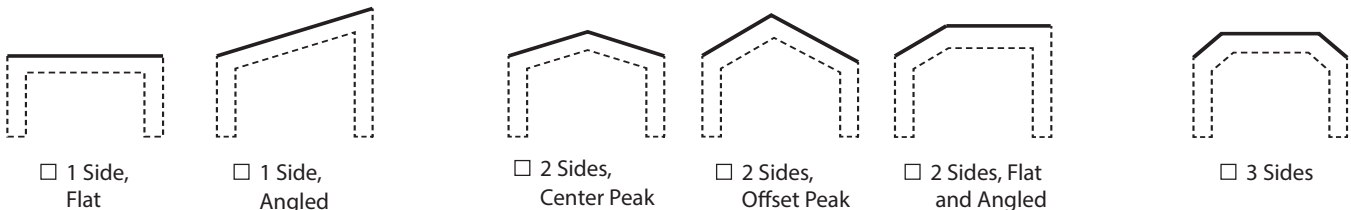
Cover Type: ☐ Box/Bed Way ☐ Linear Rail – Dual ☐ Linear Rail – Single (provide dimensions B1, C1 and D1 only)

Rail Type and Model: _____

Dimensions: A _____ B1 _____ B2 _____ C1 _____ C2 _____ D1 _____ D2 _____ G1 _____
G2 _____ P _____ Q _____ U _____ V _____ X (distance between center of rails) _____



3. External Profile Cover Shape – Top (Optional: specify shape preference for the top of the cover)



4. Legs/Sides Finishing (For covers with stiffeners, legs can optionally be fabric-wrapped on the bottom and sides)

Does Cover Ride on Legs: ☐ Yes ☐ No

Fabric Wrapping on Legs: ☐ Fabric on Sides Only (Standard)



☐ Wrap on Sides and Bottom



Note: Dynatect will design left/right sides (legs) according to cover orientation and way dimensions provided.

5. End Mounting

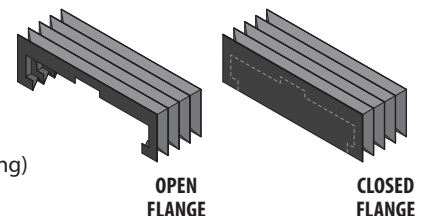
Select mounting style and accessories for each end of the cover. Dynatect can provide custom designed ends with mounting holes as specified per customer drawing. Orders placed without holes specified are shipped blank, without bolt holes.

End 1 Flange End: ☐ Open ☐ Closed

End 1 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)

End 2 Flange End: ☐ Open ☐ Closed

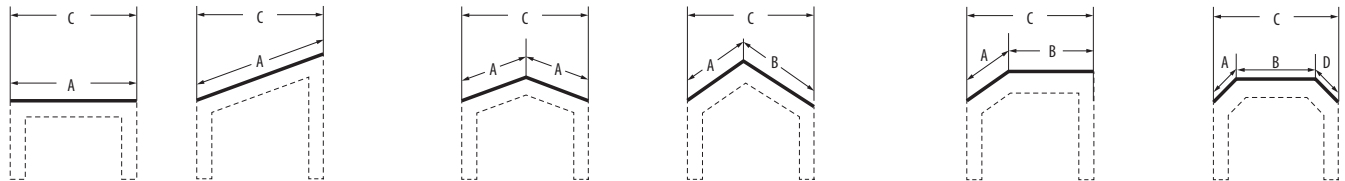
End 2 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)



BELLOWS WAY COVER – REPLACEMENT | QUOTE REQUEST FORM

1. External Cover Profile Dimensions – Top

Please specify what the top of your cover looks like, and fill in applicable dimensions. (Specify right/left "legs" under "External Cover Profile Dimensions – Side/Legs" section below.



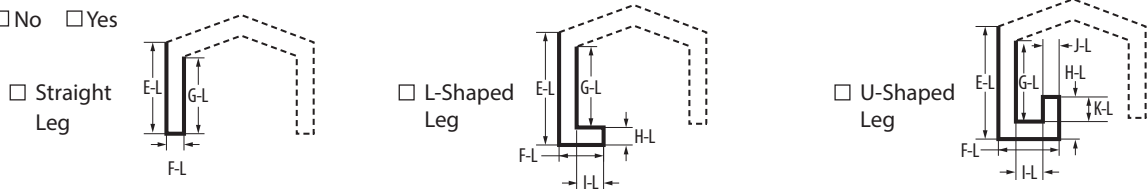
☐ 1 Side, Flat ☐ 1 Side, Angled ☐ 2 Sides, Center Peak ☐ 2 Sides, Offset Peak ☐ 2 Sides, Flat and Angled ☐ 3 Sides

Dimension "A" _____ Dimension "B" _____ Dimension "C" _____ Dimension "D" _____

2. External Cover Profile Dimensions – Sides/Legs

Please specify what the "legs" of your cover look like for left and right sides of the cover, and fill in applicable dimensions.

Left Leg: ☐ No ☐ Yes



Does Cover Ride on Leg(s): ☐ No ☐ Yes

Left Leg Dimensions: E-L _____ F-L _____ G-L _____ H-L _____ I-L _____ J-L _____ K-L _____

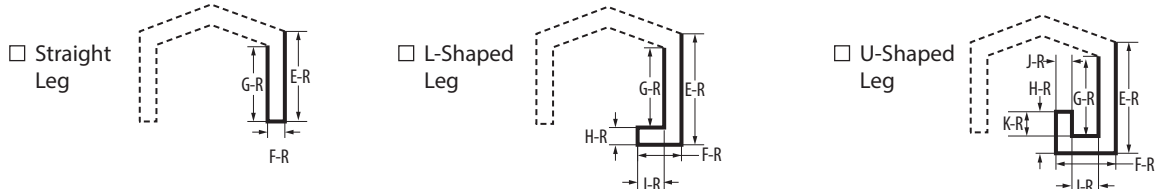
Finishing/Fabric Warp-Around: ☐ Sides Only (standard)



☐ Sides and Bottom



Right Leg: ☐ No ☐ Yes



Does Cover Ride on Leg(s): ☐ No ☐ Yes

Right Leg Dimensions: E-R _____ F-R _____ G-R _____ H-R _____ I-R _____ J-R _____ K-R _____

Finishing/Fabric Warp-Around: ☐ Sides Only (standard)



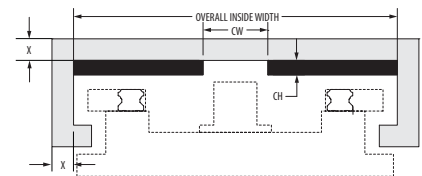
☐ Sides and Bottom



4. Internal Cover Profile Dimensions

Please specify fold height, overall inside width and, if applicable, the cutout height and width. For dovetail or other custom profile shape, please send a separate drawing.

Overall Inside Width: _____ CH (Cutout Height): _____
CW (Cutout Width): _____ X (Fold Height): _____



5. End Mounting

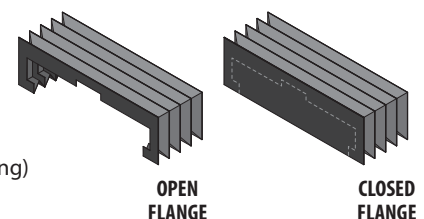
Select mounting style and accessories for each end of the cover. Dynatect can provide custom designed ends with mounting holes as specified per customer drawing. Orders placed without holes specified are shipped blank, without bolt holes.

End 1 Flange End: ☐ Open ☐ Closed

End 1 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)

End 2 Flange End: ☐ Open ☐ Closed

End 2 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)



GORDILLO™ WAY COVER | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

Please use this form to request a quote for a custom Gordillo stainless-steel clad bellows way cover. Fill in as many specification values as possible. If measurement units are different than the options shown, please specify unit of measure.

1. Application Information

New Design or Replace Existing Cover: ☐ New cover design (fill out pages 35 and 36)
☐ Replace existing cover (fill out pages 35 and 37)

Describe the type of equipment or part you need to cover: _____

Machine Make: _____ Machine Model: _____

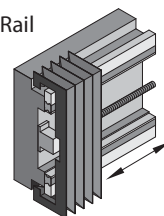
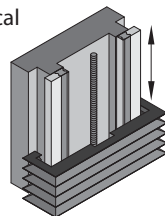
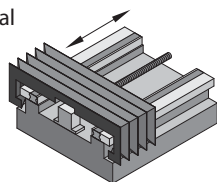
Cover Orientation: ☐ Horizontal

☐ Vertical

☐ Cross Rail

Construction Preference:

☐ Dynatect Recommendation
☐ Heat-Sealed
☐ Sewn/Folded



2. Operation Information

Continuous (ambient) Temperature: _____ °F °C Intermittent Temperature Range: Min. _____ Max. _____ °F °C

Frequency of Exposure: _____ Distance from Heat Source (if applicable)*: _____

Maximum Travel Speed*: _____ Movements/Day _____ Acceleration*: _____

*Please indicate unit of measurement for each value.

3. Environmental Information

Heat Exposure: ☐ Weld Splatter ☐ Hot Chips/Swarf ☐ High Ambient Temperature (specify in "Operation Information" above)

Abrasion Exposure: ☐ Metal Chips/Swarf ☐ Wood Chips/Shavings ☐ Light Particles/Dust ☐ Other _____

Chemical or Liquid Exposure: ☐ Water ☐ Moisture ☐ Salt or Sea Spray ☐ Petroleum/Hydrocarbons ☐ Oils (non-petroleum)
☐ Hydraulic Fluid (Petroleum-based) ☐ Hydraulic Fluid (phosphate ester-based)
☐ Acid ☐ Coolant ☐ Cutting Fluid ☐ Other (specify) _____

Contaminant Exposure Level: ☐ Minimal ☐ Occasional ☐ Heavy

Miscellaneous: ☐ Other (specify) _____

Regulatory Compliance: Standard _____ ☐ Bellows must be fire retardant (list standard to the left)

Application Notes: _____

4. Extended/Retracted/Travel Requirements

(X) Convolution Height: _____ (L) Overhang Available: _____

Retracted Length (= travel/minimum/maximum factor + .30): _____

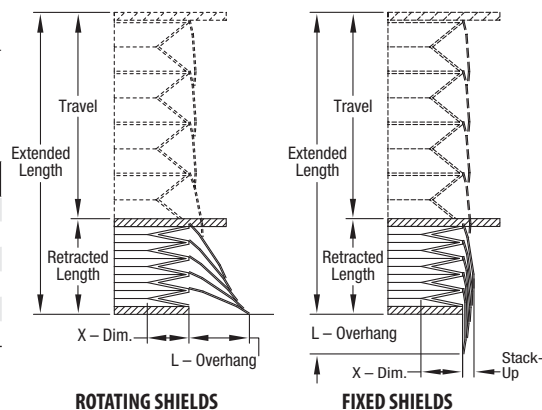
Extended Length (travel + retracted length): _____

Shields: ☐ Rotating ☐ Fixed

CONVOLUTION HEIGHT	MINIMUM/MAXIMUM FACTOR	OVERHANG
0.75	7:1	1.63 / 2.75*
1	10:1	2 / 3.5*
1.25	12:1	2.38 / 4.25*
1.5	15:1	5
1.75	17:1	3.25
2	20:1	3.5

*Top plate mounted alternate convolutions.

Note: Stack-Up varied from .375 to 1.00 as number of sections increases. Other convolution heights are available. Contact Dynatect for assistance. Table is for reference only; actual extended/retracted ratios for individual applications will vary.



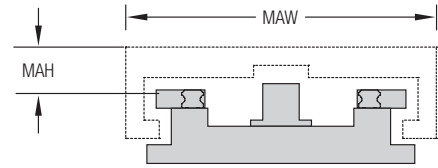
GORDILLO™ WAY COVER – NEW DESIGN | QUOTE REQUEST FORM

1. Maximum Allowable Cover Width and Height Above Way

Dimensions specified in: ☐ in ☐ mm

MAH (Maximum Allowable Height Above Way) Required: _____

MAW (Maximum Allowable Cover Width) Required: _____



2. Way Dimensions

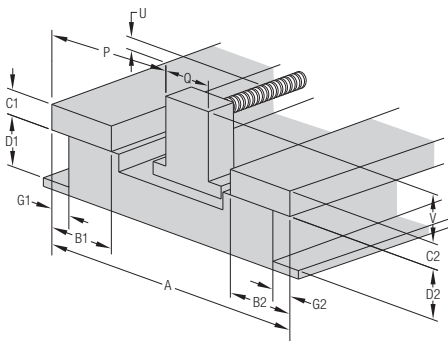
Single or dual linear rails – see left diagram below and specify rail type and model. Standard box/bed ways – see right diagram below. If the way does not resemble the way profiles shown below, please send a sketch/drawing of your actual way dimensions. Be sure to note any space restrictions; reference "Maximum Allowable Cover Width And Height Above Way" above.

Cover Type: ☐ Box/Bed Way ☐ Linear Rail – Dual ☐ Linear Rail – Single (provide dimensions B1, C1 and D1 only)

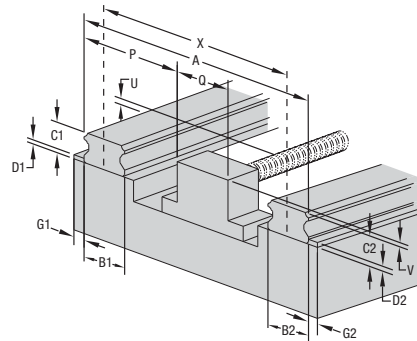
Rail Type and Model: _____

Dimensions: A _____ B1 _____ B2 _____ C1 _____ C2 _____ D1 _____ D2 _____ G1 _____
G2 _____ P _____ Q _____ U _____ V _____ X (distance between center of rails) _____

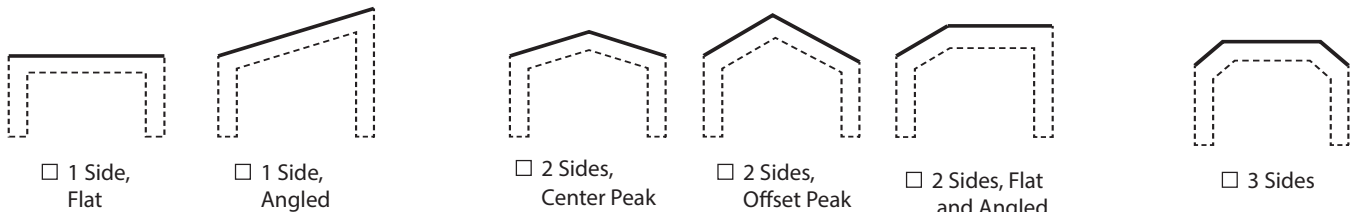
SINGLE OR DUAL LINEAR RAILS



STANDARD BOX/BED WAYS



3. External Profile Cover Shape – Top (Optional: specify shape preference for the top of the cover)



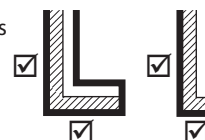
4. Legs/Sides Finishing (For covers with stiffeners, legs can optionally be fabric-wrapped on the bottom and sides)

Does Cover Ride on Legs: ☐ Yes ☐ No

Fabric Wrapping on Legs: ☐ Fabric on Sides Only (Standard) ☒ ☒



☐ Wrap on Sides and Bottom ☒ ☒



Note: Dynatect will design left/right sides (legs) according to cover orientation and way dimensions provided.

5. End Mounting

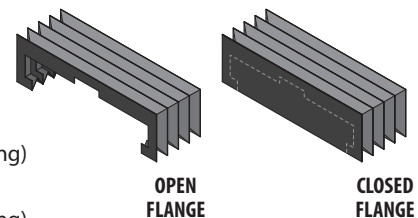
Select mounting style and accessories for each end of the cover. Dynatect can provide custom designed ends with mounting holes as specified per customer drawing. Orders placed without holes specified are shipped blank, without bolt holes.

End 1 Flange End: ☐ Open ☐ Closed

End 1 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)

End 2 Flange End: ☐ Open ☐ Closed

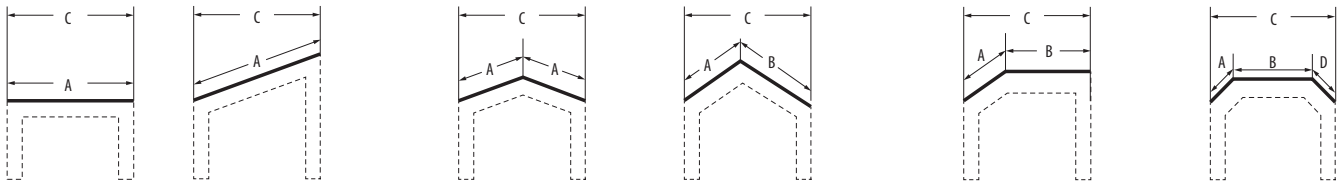
End 2 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)



GORDILLO™ WAY COVER – REPLACEMENT | QUOTE REQUEST FORM

1. External Cover Profile Dimensions – Top

Please specify what the top of your cover looks like, and fill in applicable dimensions. (Specify right/left “legs” under “External Cover Profile Dimensions – Side/Legs” section below.



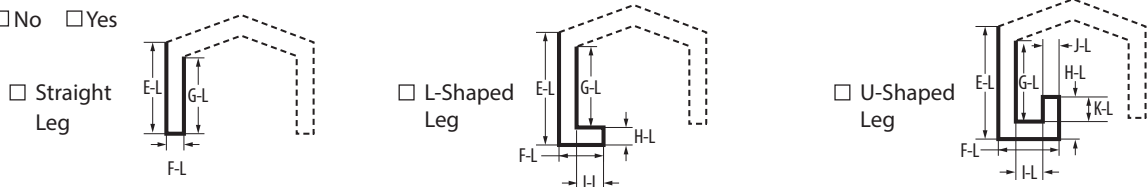
☐ 1 Side, Flat ☐ 1 Side, Angled ☐ 2 Sides, Center Peak ☐ 2 Sides, Offset Peak ☐ 2 Sides, Flat and Angled ☐ 3 Sides

Dimension “A” _____ Dimension “B” _____ Dimension “C” _____ Dimension “D” _____

2. External Cover Profile Dimensions – Sides/Legs

Please specify what the “legs” of your cover look like for left and right sides of the cover, and fill in applicable dimensions.

Left Leg: ☐ No ☐ Yes



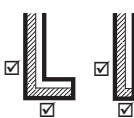
Does Cover Ride on Leg(s): ☐ No ☐ Yes

Left Leg Dimensions: E-L _____ F-L _____ G-L _____ H-L _____ I-L _____ J-L _____ K-L _____

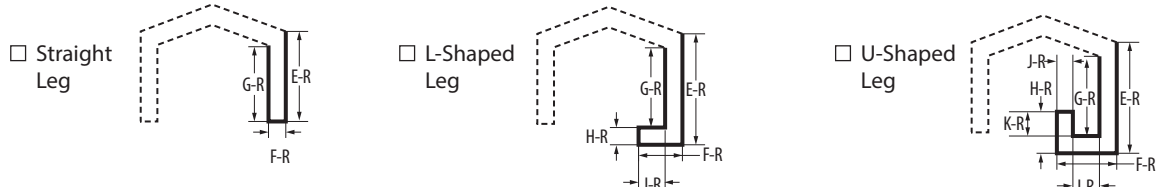
Finishing/Fabric Warp-Around: ☐ Sides Only (standard)



☐ Sides and Bottom



Right Leg: ☐ No ☐ Yes



Does Cover Ride on Leg(s): ☐ No ☐ Yes

Right Leg Dimensions: E-R _____ F-R _____ G-R _____ H-R _____ I-R _____ J-R _____ K-R _____

Finishing/Fabric Warp-Around: ☐ Sides Only (standard)



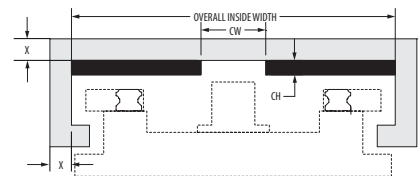
☐ Sides and Bottom



3. Internal Cover Profile Dimensions

Please specify fold height, overall inside width and, if applicable, the cutout height and width. For dovetail or other custom profile shape, please send a separate drawing.

Overall Inside Width: _____ CH (Cutout Height): _____
CW (Cutout Width): _____ X (Fold Height): _____



4. End Mounting

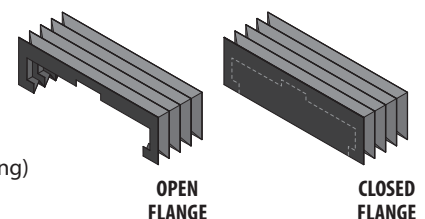
Select mounting style and accessories for each end of the cover. Dynatect can provide custom designed ends with mounting holes as specified per customer drawing. Orders placed without holes specified are shipped blank, without bolt holes.

End 1 Flange End: ☐ Open ☐ Closed

End 1 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)

End 2 Flange End: ☐ Open ☐ Closed

End 2 Mounting Options: ☐ Plate ☐ Hook & Loop Fastener ☐ Other/Special (provide drawing)



FLAT/STRIP-TYPE BELLOWS | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

Please use this form to request a quote for a custom flat/strip-type bellows. Fill in as many specification values as possible. If measurement units are different than the options shown, please specify unit of measure.

1. Application Information

New Design or Replacement Application: ☐ New Design ☐ Replacement
 Cover Orientation: ☐ Horizontal ☐ Vertical ☐ Cross Rail
 Construction Preference: ☐ Dynatect Recommendation ☐ Heat-Sealed ☐ Sewn ☐ Sewn/Folded ☐ Vulca-Seal®

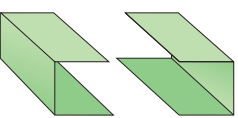
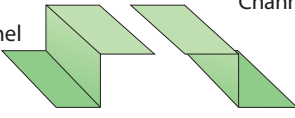
2. Operation Information

Continuous (ambient) Temperature: _____ °F °C Intermittent Temperature Range: Min. _____ Max. _____ °F °C
 Frequency of Exposure: _____ Distance from Heat Source (if applicable)*: _____
 Maximum Travel Speed*: _____ Movements/Day _____ Acceleration*: _____
 *Please indicate unit of measurement for each value.

3. Environmental Information

Heat Exposure: ☐ Weld Splatter ☐ Hot Chips/Swarf ☐ High Ambient Temperature (specify in "Operation Information" above)
 Abrasion Exposure: ☐ Metal Chips/Swarf ☐ Wood Chips/Shavings ☐ Light Particles/Dust ☐ Other _____
 Chemical or Liquid Exposure: ☐ Water ☐ Moisture ☐ Salt or Sea Spray ☐ Petroleum/Hydrocarbons ☐ Oils (non-petroleum)
☐ Hydraulic Fluid (petroleum-based) ☐ Hydraulic Fluid (phosphate ester-based)
☐ Acid ☐ Coolant ☐ Cutting Fluid ☐ Other (specify) _____
 Contaminant Exposure Level: ☐ Minimal ☐ Occasional ☐ Heavy
 Miscellaneous: ☐ UV/Ozone ☐ Outdoors ☐ Food-Grade/FDA ☐ Laser Beam ☐ Clean Room ☐ Other (specify) _____
 Regulatory Compliance: Standard _____ ☐ Bellows must be fire retardant (list standard to the left)
 Application Notes: _____

4. Cover Support Channels (Channels can be included upon request. It is recommended to provide a drawing.)

Will the cover operate within an existing channel? ☐ Yes ☐ No* *Would you like us to provide channel supports? ☐ Yes ☐ No
 Support Type: ☐ C-Channel  ☐ Z-Channel  Channel Material: ☐ Aluminum ☐ Steel ☐ Stainless Steel

5. Cover Dimensions

(X) Bellows Fold Height: _____ Cover Width: _____ ☐ in ☐ mm

6. Extended/Retracted/Travel Requirements

Specify extended and retracted length requirements, or indicate travel and we will advise retracted length. (Extended length = retracted length + travel distance)

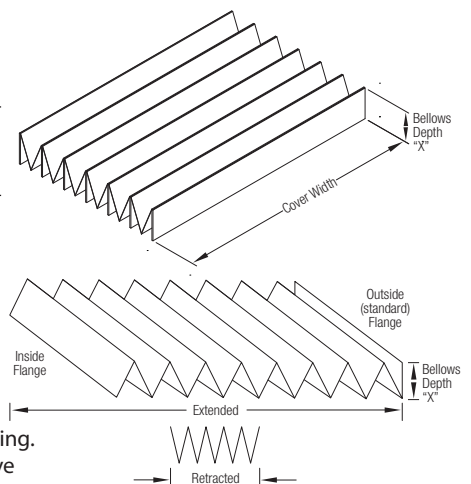
Retracted Length: _____ Travel Distance: _____
 Extended Length: _____ Dimensions specified in: ☐ in ☐ mm

7. End Style/Mounting

We can provide custom designed ends with mounting holes as specified per customer drawing. Orders placed without holes specified are shipped blank, without bolt holes. Reference above diagram for inside/outside flange.

End 1: ☐ Outside Flange (standard) ☐ Inside Flange
Options: ☐ Plate ☐ Hook & Loop Fastener
☐ Other/Special (provide drawing)

End 2: ☐ Outside Flange (standard) ☐ Inside Flange
Options: ☐ Plate ☐ Hook & Loop Fastener
☐ Other/Special (provide drawing)



LIFT TABLE/SCISSORS MECHANISM COVERS | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

1. Application Information

- Bellows For: ☐ New Cover Design ☐ Replace Existing Cover
- Environment: ☐ Clean Room* ☐ Antimicrobial Agents* ☐ Sparks ☐ Grease ☐ Washdown*
☐ Fire Retardant* ☐ Dust Cover ☐ Other _____
- Movement: ☐ Lateral (Shear) Movement* (please send sketch of movement) ☐ Tilt (please specify degree of tilt: _____)

*Gorframe™ is used in applications with lateral shear movement. Gorframe is generally used for washdown, clean room, or where materials must meet specifications, such as fire retardant or antimicrobial.

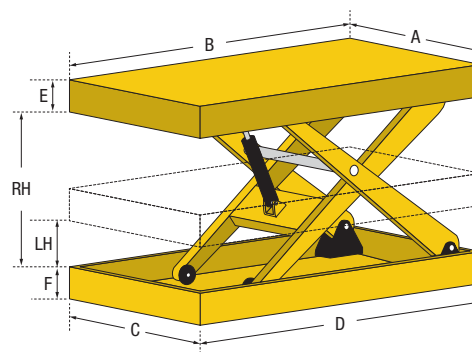
2. Cover Construction Type

- Cover Type: ☐ Liftgard™ ☐ Gorframe™ ☐ Sewn ☐ Application-based recommendation

3. Lift Table Dimensions

Dimensions specified in: ☐ in ☐ mm

- (A) Table Width: _____ (E) Table Height: _____
 (B) Table Length: _____ (F) Base Height: _____
 (C) Base Width: _____ (RH) Raised Height: _____
 (D) Base Length: _____ (LH) Lowered Height: _____



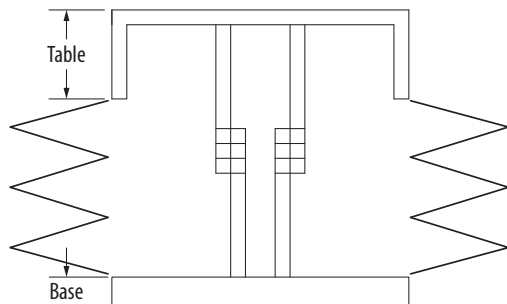
4. Cover Venting and Options (Please check options desired)

- ☐ Venting* For venting considerations, provide maximum lift speed: _____ (inches/second)
- ☐ Maintenance Straps ☐ Zipper (for quick installation – a zipper is standard on Liftgard covers)

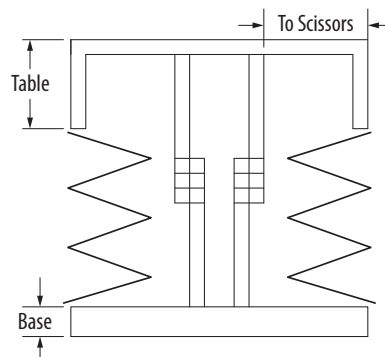
*Vents are required if base and table mounts do not allow for air exhaust. Liftgard covers already incorporate a venting system. Depending on speed, additional venting may be required.

5. Cover Location (Bellows Orientation) (Please select one)

- ☐ Outside Cover Location (proceed to "Outside Cover Mount" on next page)
- ☐ Inside Cover Location (proceed to "Inside Cover Mount" on next page)
- ☐ Other Cover Location (contact Dynatect)



Are there any clearance issues on any side of the lift table? ☐ No ☐ Yes (provide sketch)



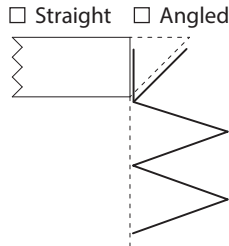
Shortest distance between scissors mechanism and outside edge of table top: _____ (required)

LIFT TABLE/SCISSORS MECHANISM COVERS | QUOTE REQUEST FORM

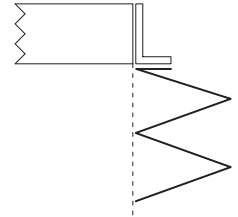
6. Outside Cover Mount – Select mounting type (collar or flange), then a mounting option.

– MOUNTING TO TABLE TOP –

- ☐ **Collar Mount**
(specify “straight” or “angled”)
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener
- ☐ Other (specify) _____

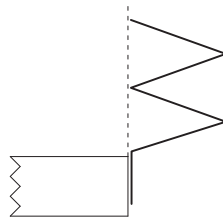


- ☐ **Flange Mount**
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener
- ☐ Other (specify) _____

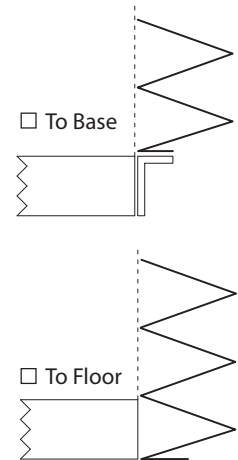


– MOUNTING TO BASE/FLOOR (OPTIONAL) –

- ☐ **Collar Mount**
- ☐ Fabric Pocket/Loop
- ☐ Fabric Pocket/Loop with Rod
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener



- ☐ **Flange Mount**
(specify “to base” or “to floor”)
- ☐ Fabric Pocket/Loop
- ☐ Fabric Pocket/Loop with Rod
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener

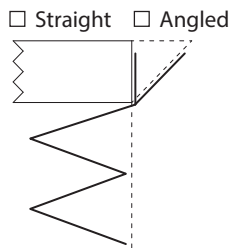


*Reinforced strips shipped without mounting holes unless dwg. received.

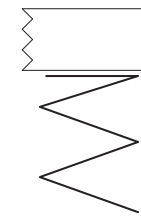
7. Inside Cover Mount – Select mounting type (collar or flange), then a mounting option.

– MOUNTING TO TABLE TOP –

- ☐ **Collar Mount**
(specify “straight” or “angled”)
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener
- ☐ Other (specify) _____

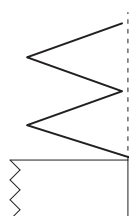


- ☐ **Flange Mount**
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener
- ☐ Other (specify) _____



– MOUNTING TO BASE (OPTIONAL) –

- ☐ **Collar Mount**
- ☐ Fabric Pocket/Loop
- ☐ Fabric Pocket/Loop with Rod
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener



- ☐ **Flange Mount**
- ☐ Fabric Pocket/Loop
- ☐ Fabric Pocket/Loop with Rod
- ☐ Reinforced* with PVC Strips (default)
- ☐ Reinforced* with Metal Strips
(specify type) _____
- ☐ Hook & Loop Fastener



*Reinforced strips shipped without mounting holes unless dwg. received.

GORTITE® ROLL-UP DOORS | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Date Required _____ Email _____
 Reference _____ Quantity _____ Compartment _____

1. Cabinet Dimensions

Compartment:

DOW:

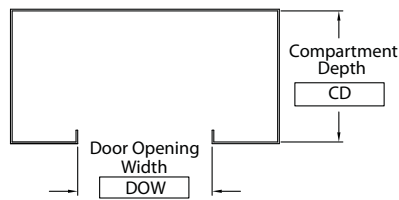
DOH:

HH:

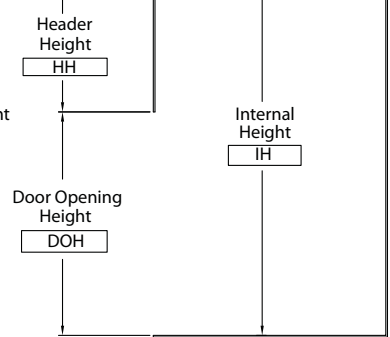
IH:

CD:

Top View



Side View



2. Door Requirements

Door Finish: ☐ Satin Anodized
☐ Mill Finish (for painting by customer)
☐ Wet Painted
☐ Door Only
☐ Door and Trim
☐ Handle/Finger Rail
 Paint Specification: _____

Roller Location: ☐ Front of Compartment
☐ Rear of Compartment

Side Rail:

☐ Standard ☐ Recessed ☐ Universal ☐ P-Series ☐ R-Series

Pre-Drilled Mounting Holes in Side Rails:

☐ Yes
☐ Pattern by Dynatect
☐ Pattern by Customer (please attach drawing)

Top Drip Rail:

☐ Yes ☐ Standard Length
☐ Customer Length
 Qty: _____ Length: _____
☐ No

3. Options

Still Plate: ☐ Yes: ☐ Standard ☐ Universal
☐ No

Manual Key Lock: ☐ Yes ☐ No

Key Type: ☐ J236 ☐ 1250

Magnetic Door Ajar Switch:

☐ Yes: ☐ Switch on Right Side Facing Door
☐ Switch on Left Side Facing Door
☐ Ship Loose
 Ground: ☐ Pos ☐ Neg

☐ No

Pull Strap (for tall doors): ☐ Yes ☐ No

Pull Lock (requires manual lock):

☐ Yes: ☐ Lock on Right Side of Door
☐ Lock on Left Side of Door
☐ Lock on Both Sides of Door (36" or wider)

☐ No

Cabinet Lights:

☐ Yes ☐ Lights on Right Side of Door
☐ Lights on Left Side of Door
☐ Lights on Both Sides of Door
☐ Ship Loose

☐ No

GORPLATE™ COVERS | QUOTE REQUEST FORM

Date _____ Address _____
 Company Name _____ City _____ State/Prov. _____
 Contact _____ Country _____ Zip/Postal Code _____
 Quantity _____ Telephone _____ Fax _____
 Email _____

1. Application Information

- ☐ Replacement Cover (if measuring from existing cover, a drawing is required; DWG or DXF file preferred) ☐ New Design (please supply drawing/CAD file in DWG or DXF file format or photo of your application)
- Cover Orientation: ☐ Horizontal ☐ Vertical ☐ Cross Rail

2. Environmental Information

Chemicals (specify type and %) _____ Temperature Range: _____ ☐ °F ☐ °C

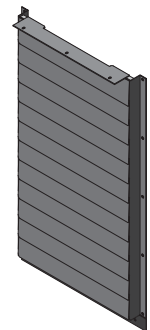
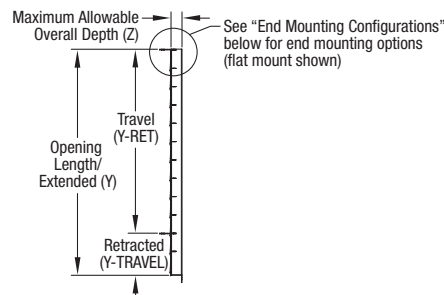
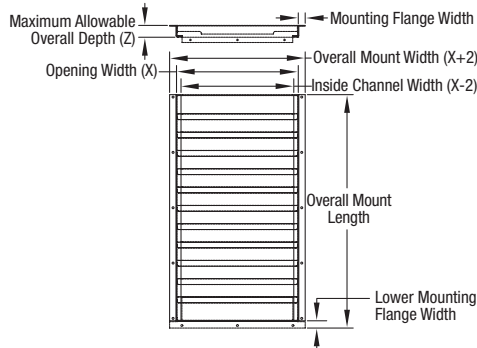
3. Operation Information

Maximum Travel Speed*: _____ Movements/Day _____ Acceleration*: _____
 *Please indicate unit of measurement for each value.

4. Cover Dimensions (Specify opening length requirement or indicate travel. Dynatect Manufacturing, Inc. will advise overall length needed for cover.)

(X) Opening Width: _____ (Y) Opening Length: _____ (Z) Maximum Allowable Overall Depth: _____
 (Y-TRAVEL) Retracted Length: _____ (Y-RET) Travel: _____ Dimensions specified in: ☐ in ☐ mm

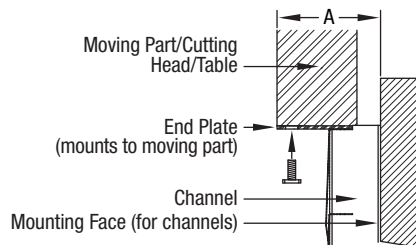
Note: Mounting flange width is 1.00 on standard covers. Please contact a Dynatect Manufacturing, Inc. representative to accommodate your special applications.



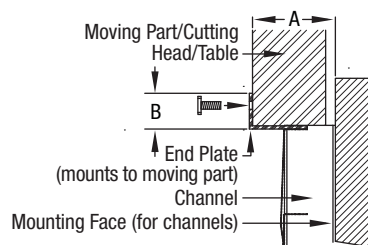
5. Way Interference (Please describe any interference.)

6. End Mounting Configurations

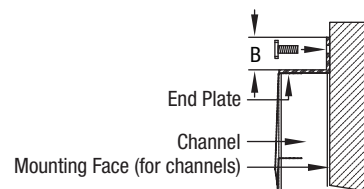
Dimension A: _____ Dimension B: _____



☐ Flat Mount



☐ Projected Angle Mount



☐ Face Angle Mount

☐ Custom Mounting

Note: All Gorplate Covers/Channels are provided without mounting holes. If a specific mounting hole pattern is required please supply a sketch/drawing. Include drawing for configurations other than the standards shown above.