Folding Bellows for Universal Joints and Shaft Joints

These folding bellows are made of high quality chrome tanned, black impregnated leather. They are resistant to oil, water and weather and serve as a protection for the joints against dust, humidity and acidic vapours. By filling the folding bellows with lubrication grease and then securing them with band clamp fittings, you achieve life-long lubrication.

All dimensions in mm. For non-standard sizes & materials, see pages 48-51.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size D/D1</th>
<th>Size D/D2</th>
<th>Length L1/L2</th>
<th>No. of Folds</th>
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Temp.: -196ºC to +90ºC (-320ºF to +194ºF)

Higher temperatures & other designs upon request.

### Single Universal Joints (Fig. 1)

- **Part No.** 20246 to 20266
- **Size D/D1** 13 to 30 mm
- **Size D/D2** 16 to 40 mm
- **Length L1/L2** 12 to 40 mm
- **No. of Folds** 2 to 6

### Double Universal Joints (Fig. 1)

- **Part No.** 20254 to 20259
- **Size D/D1** 13 to 40 mm
- **Size D/D2** 16 to 50 mm
- **Length L1/L2** 12 to 40 mm
- **No. of Folds** 3 to 5

### Telescopic Universal Joints - Simrit (Fig. 2)

- **Part No.** 20254 to 20259
- **Size D/D1** 13 to 40 mm
- **Size D/D2** 16 to 50 mm
- **Length L1/L2** 12 to 40 mm
- **No. of Folds** 3 to 5

### Universal Joints - Single (Fig. 1)

- **Part No.** 20491 to 20278
- **Size D/D1** 16 to 58 mm
- **Size D/D2** 20 to 70 mm
- **Length L1/L2** 12 to 75 mm
- **No. of Folds** 2 to 6

### Telescopic Universal Joints - Simrit (Fig. 3)

- **Part No.** 20284 to 20288
- **Size D/D1** 25 to 95 mm
- **Size D/D2** 20 to 50 mm
- **Length L1/L2** 20 to 50 mm
- **No. of Folds** 5 to 9

### Temperature range:

- From -196ºC to +90ºC (-320ºF to +194ºF)

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## FB range of Protective Bellows


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<thead>
<tr>
<th>Part No.</th>
<th>a</th>
<th>d</th>
<th>ZD</th>
<th>AZ</th>
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Material: Molerit TH59 black
Service temperature stability +70°C to max. + 85°C,
cold-crack temperature -32°C
Includes 2 pieces galvanized hose clips.

Notes: The bellows should not be compressed below the ZD dimension or extended beyond the AZ dimension.

All dimensions in mm.
All dimensions subject to change without notice.
Other types of Protective Bellows

**PVC Round Bellows**
- Many possible dimensions.
- No tool costs for dipped bellows.
- Installation of steel flanges possible.
- Insertion of wire rings possible.
- Zippers can be sewn in.
- Standard or made to order options.
- For shaft sizes 15mm to 250mm.

**Special Fabric Round Bellows**
- Abrasion proof.
- Stable up to 800°C radiating heat.
- Resistant to: acid, oil and weather.
- Pressure resistant through reinforcement with wire rings or spirals.
- Many different material options are available, please contact us for more information.

**Leather Round/Conical/Square/Pyramid Shaped Bellows**
- Made to order sizes.
- Fulfills even extremely difficult requirements.
- Treated industrial grade leather.
- Protection against water, oil, welding sparks, cutting swarf etc.
- Highly flexible and resistant to aging.

**Homogen Bellows**
- Standard widths: 200-400mm.
- Lengths 33mm (min) to 200mm (max).
- Single layered material offering: easy mobility; holds it’s shape; high linear speed; effective protection for guide ways.

**Box Bellows**
- Ideal for increased work safety as moving parts are covered and for greater dimensional stability.

**Polygonal Bellows**
- The standard polygonal are dimensioned hexagonally. Plastic coated material provides protection against oil, cooling emulsions, water and dust, as well as being fluid tight and providing resistance to welding sparks & radiant heat.

**Round Textile Bellows**
- Reliable protection from contaminants.
- Suitable for external applications.
- Individual elements sewn together larger extension and greater compression.
- Optional external guides and expansion locks.

**Rubber Disk Bellows**
- Absolutely leakproof - individual rubber disks are bonded together.
- High resistance to mechanical stress.
- Weather proof & resistant to UV radiation.

**Steel Telescopic Sheet Bellows**
- Hinged telescopic sheets. Reliable protection against large quantities of swarf. No glued connections. High linear speeds possible.
- Rust and acid resistant telescopic sheets.
- Individual telescopic sheets easy to replace.
- Also available with complete sealing against cooling emulsions if required.

**Rigid Steel Telescopic Sheet Bellows**
- Permanent pressure from the steel sheets.
- No glued connections - welded under tension.
- High linear speed possible. Impervious to liquids.
- Rust and acid resistant telescopic sheets. Various shapes available.
- Also available with complete sealing against cooling emulsions if required.

**Telescopic Steel Covers**
- Tightly sealed against oil, coolant and swarf. Choice of shapes and dimensions.
- Minimum maintenance required. Individual guide variation.
- High linear speed. Walk-on versions available.
- Specifically developed wiper systems.
- Construction and development with CAD.
- Highest precision through laser and numerically controlled manufacturing.
- Guaranteed precision for repeat orders.
- Special damping and buffer systems for medium to high speeds.

Please contact T.E.A. for faxed data sheets and further information
Steel Spiral Protective Bellows

Providing clean, safe conditions for operation of linear shafts and ballscrews. The key to this product is the proven success in the protection against chips, dust and liquids combined with high temperature stability and chemical resistance.

These spirals distinguish themselves in safety and performance, and in addition require little maintenance. Retrofit mounting is also possible. They provide effective sealing and are self-cleaning when correctly installed.

These spirals are conically wound, and follow the movement of the machine. Manufactured from high quality blue steel or alternatively from high grade stainless steel, they can operate vertically, horizontally or in a sloping position.

Material: High quality polished blue steel or stainless steel
Operating angle: Vertical, horizontal or sloping
Size Range: 15mm to 210mm shaft diam.
Provides protection against: Chips, dust and/or liquid
Operating conditions: Bellow covers are recommended for applications:
- With infrequent movements
- With low linear speed
- In a dry working environment
- Where maintenance is impossible

Beneficial features: High temperature stability
Chemical resistance
Little maintenance
Retrofit mounting possible
Effective sealing
Self cleaning in vertical installations

Please contact T.E.A. for data sheets, or photocopy next page (page 51) complete and fax to T.E.A. for price and delivery quotation.
Enquiry Form for Protective Bellows

Please photocopy this page, complete with as much information as possible, then fax or email to T.E.A. for a quotation. Fax: 07-4129 2437  Email: sales@tea.net.au

Date: ___________________  Company: _______________________________________

Contact Name: ____________________________________________________________

Ph: ___________________  Fax: ___________________  Email: ___________________

Type of protective bellow required: __________________________________________

Qty: ___________________

Material: ________________________________________________________________

Inside diam. D1: ___________________

Inside diam. D2: ___________________

Minimum compressed length: ___________________ (Excluding cuff lengths)

Maximum extended length: ___________________ (Excluding cuff lengths)

Maximum diam. of convolutions D3: ______________

Cuff length L1: ___________________

Cuff length L2: ___________________

Shaft diam. passing through convolutions: ______________

Working environment: ____________________________________________________

Other details: ____________________________________________________________

__________________________

__________________________

□ Indoor use  □ Outdoor use

□ Humidity  □ Dryness

□ Heat  □ Dust/sand

□ Welding splashes  □ Saltwater

□ Rust action  □ Abrasive action

□ Magnetic  □ Vacuum

□ Chips large  □ Chips small

□ Coolant type  □ Oil type

□ Internal support rings for horizontal application

□ Binder on convolution joins, inside & outside

□ Longitudinal zipper, straight or spiral

□ Double stitch on cuff connections

□ Flange connections, one end / both ends

□ Single cuff  □ No cuff

Working Temperature:  Min. = ______________

Max. = ______________

Average = ______________
Thank you for viewing product information on TEA’s range of engineering components.

Now please contact us at the nearest office to you for any further information, prices and availability:

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Fax: 61-(0)7 4129 2437
Email: sales@tea.net.au
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Fax: 1-804-342-0006
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