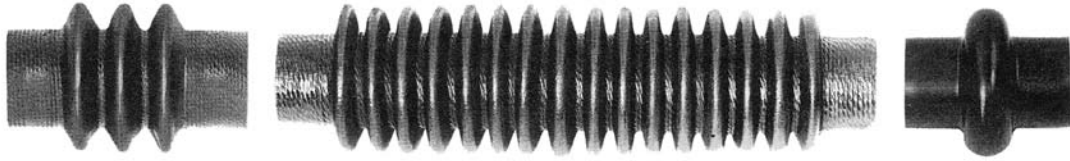


Folding Bellows for Universal Joints and Shaft Joints



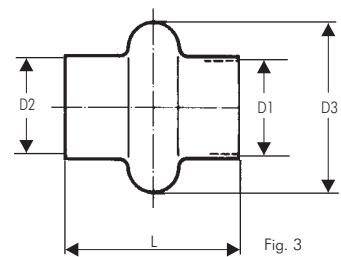
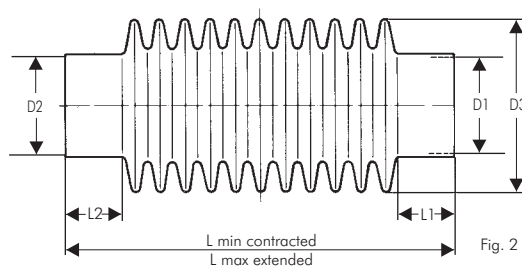
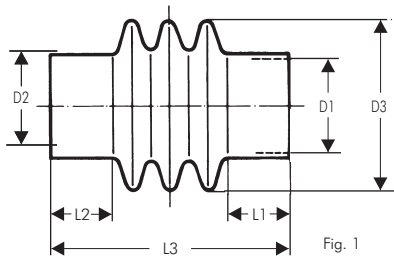
These folding bellows are made of high quality chrome tanned, black impregnated leather. They are resistant to oil, water and weather and serve as a protection for the joints against dust, humidity and acidic vapours. By filling the folding bellows with lubrication grease and then securing them with band clamp fittings, you achieve life-long lubrication. All dimensions in mm. For non-standard sizes & materials, see pages 48-51.

for Single Universal Joints (Fig. 1)					
Part No.	Size		Length		No. of Folds
	D ₁ /D ₂	D ₃	L _{1/2}	L ₃	
FB 246	13	30	12	42	2
FB 262	16	32	15	40	2
FB 247	16	32	15	52	2
FB 248	20	35	20	62	2
FB 249	25	40	20	74	3
FB 250	32	55	20	86	3
FB 251	40	65	25	108	3
FB 263	50	75	25	105	3
FB 252	50	75	25	132	4
FB 264	63	95	30	130	4
FB 253	63	95	30	166	5
FB 265	75	105	40	160	5
FB 266	90	120	40	190	6

Temp.: -196°C to +90°C (-320°F to +194°F)

for Double Universal Joints (Fig. 1)					
Part No.	Size		Length		No. of Folds
	D ₁ /D ₂	D ₃	L _{1/2}	L ₃	
FB 254	13	30	12	60	3
FB 267	16	32	15	62	3
FB 255	16	32	15	74	3
FB 256	20	35	20	88	3
FB 257	25	40	20	104	5
FB 258	32	55	20	124	5
FB 259	40	65	25	156	6
FB 260	50	75	25	188	6
FB 261	63	95	30	238	9
FB 268	75	105	40	245	11
FB 269	90	120	40	290	11

Higher temperatures & other designs upon request



Simrit synthetic rubber

for Universal Joints - Single (Fig. 1)					
Part No.	Size		Length		No. of Folds
	D ₁ /D ₂	D ₃	L _{1/2}	L ₃	
FB 491	16	32	12	34	2
FB 270	18	35	12	40	2
FB 271	22	40	12	48	2
FB 272	26	45	12	56	2
FB 273	29	50	12	60	3
FB 274	32	55	15	68	3
FB 275	37	65	15	74	3
FB 276	42	70	20	82	3
FB 277	47	75	20	95	3
FB 278	52	80	20	105	3
FB 279	58	90	25	122	4

Temperature range: from -196°C to +90°C (-320°F to +194°F)

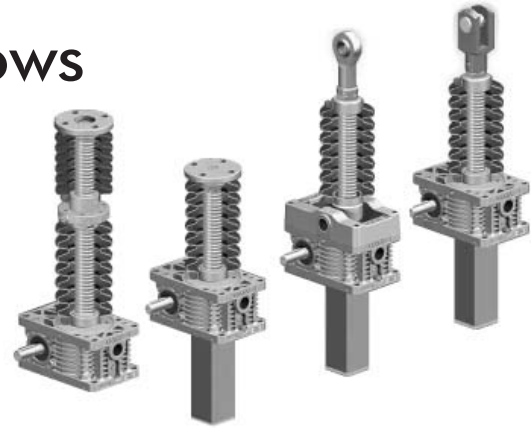
for Telescopic Universal Joints - (Fig. 2)						
Part No.	Size		Length			No. of Folds
	D ₁ /D ₂	D ₃	L ₁ /L ₂	L min	L max	
FB 254	13	30	12	40	80	3
FB 280	16	32	15	52	102	4
FB 281	20	35	20	62	122	6
FB 282	25	40	20	67	137	7
FB 283	32	55	20	70	150	6
FB 259	40	65	25	73	175	6
FB 284	50	75	25	95	245	9
FB 285	63	95	30	117	317	11
FB 286	75	105	40	137	337	11
FB 269	90	120	40	122	360	11

Higher temperatures & other designs upon request

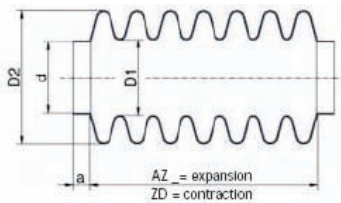
for Universal Joints - Simrit (Fig. 3)			
Part No.	Size		Length
	D ₁ /D ₂	D ₃	
FB 287	16	36	32
FB 288	18	38	38
FB 289	22	44	40
FB 290	26	50	45
FB 291	29	53	50
FB 292	32	58	60
FB 293	37	65	65
FB 294	42	71	75
FB 295	47	76	90
FB 296	52	88	95
FB 297	58	98	95

Temperature range: from -196°C to +90°C (-320°F to +194°F)

FB range of Protective Bellows



Material: Polyurethane coated polyester fabric type OZ-23,
 Temperature stability -15oC to +70oC,
 Includes 2 pieces galvanized hose clips.



Part No.	a	d	ZD	AZ	Stroke	D1	D2	Kg.
Z-5-FB-500	10	29	100	600	500	38	68	0.19
Z-5-FB-800	10	29	120	920	800	38	68	0.30
Z-10-FB-700	10	39	100	800	700	38	75	0.23
Z-10-FB-1000	10	39	150	1150	1000	38	75	0.32
Z-25-FB-700	15	46	100	800	700	63	105	0.32
Z-25-FB-1000	15	46	120	1120	1000	63	105	0.43
Z-35/50-FB-600	15	60	72	672	600	63	105	0.23
Z-35/50-FB-1000	15	60	130	1130	1000	63	105	0.42
Z-35/50-FB-1200	15	60	125	1325	1200	63	105	0.42
Z-35/50-FB-1500	15	60	180	1680	1500	63	105	0.51
Z-100-FB-600	15	85	72	672	600	63	105	0.29
Z-100-FB-1000	15	85	130	1130	1000	63	105	0.40
Z-100-FB-1500	15	85	180	1680	1500	63	105	0.44
Z-150-FB-600	15	90	72	672	600	110	150	0.40
Z-150-FB-1000	15	90	130	1130	1000	110	150	0.60
Z-150-FB-1500	15	90	180	1680	1500	110	150	0.82
Z-250-FB-600	15	120	72	672	600	110	150	0.40
Z-250-FB-1000	15	120	130	1130	1000	110	150	0.60
Z-250-FB-1500	15	120	180	1680	1500	110	150	0.82
Z-350-FB-900	15	145	108	1008	900	150	200	0.70
Z-350-FB-1500	15	145	180	1680	1500	150	200	1.10



Part No.	a	d	ZD	AZ	Stroke	D1	D2	Kg.
Z-5-FB-265	10	29	35	300	265	40	76	0.15
Z-10-FB-340	10	39	80	420	340	40	80	0.21
Z-25-FB-300	15	46	70	370	300	50	83	0.25
Z-35/50-FB-390	15	60	85	475	390	66	102	0.43
Z-100-FB-285	15	85	75	360	285	85	118	0.29
Z-150-FB-350	15	90	50	400	350	92	141	0.44
Z-250-FB-390	15	120	90	480	390	125	166	1.10
Z-350-FB-600	15	145	100	700	600	172	236	2.40

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



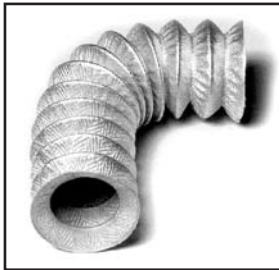
PVC Round Bellows

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.



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.



Special Fabric Round Bellows

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



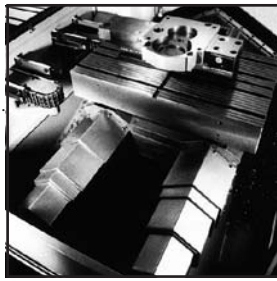
Rubber Disk Bellows

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



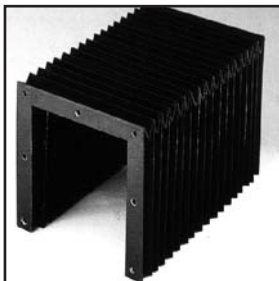
Leather Round/Conical/Square/Pyramid Shaped Bellows

Made to order sizes.
Fulfills even extremely difficult requirements.
Treated industrial grade leather.
Protection against water, oil, welding sparks, cutting swarfs etc.
Highly flexible and resistant to aging.



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.

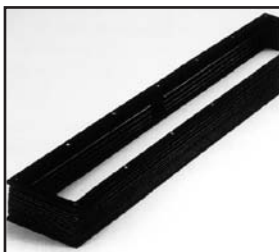


Homogen Bellows

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.

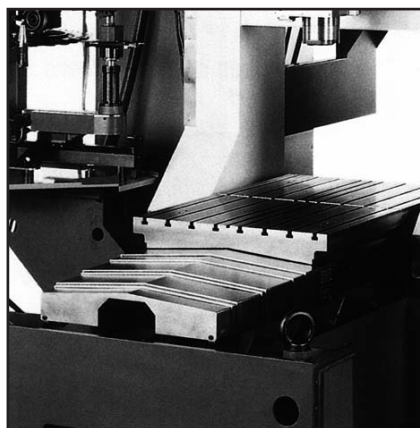
Rigid Steel Telescopic Sheet Bellows

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



Box Bellows

Ideal for increased work safety as moving parts are covered and for greater dimensional stability.



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.

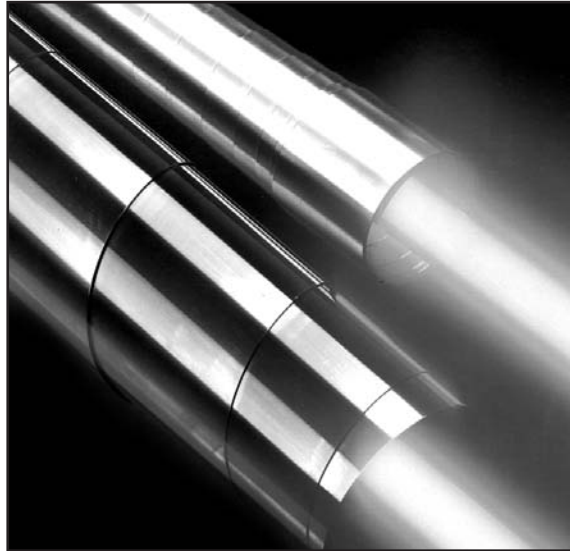


Polygonal Bellows

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.

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.

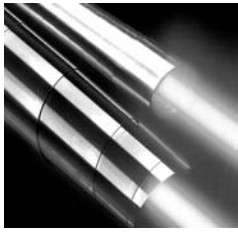
These spirals distinguish themselves in safety and performance, and in addition require little maintenance. Retrofit mounting is also possible.

They provide effective sealing and are self-cleaning when correctly installed.

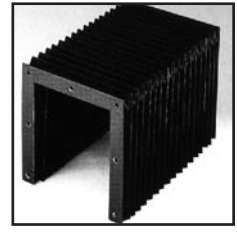
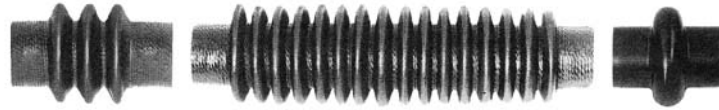
These spirals are conically wound, and follow the movement of the machine. Manufactured from high quality blue steel or alternatively from high grade stainless steel, they can operate vertically, horizontally or in a sloping position.

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: <ul style="list-style-type: none">- 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

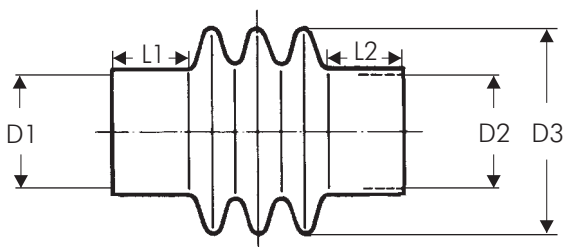
Special Features - available on request:

- Internal support rings for horizontal application
- External tie straps for vertical 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 = _____





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