

# Gillies Pipe Bellows

Single sphere moulded rubber bellows with loose flanges are ideal for pump isolation or compensating for minor pipeline misalignment.



TECHNICAL GUIDE: **APF7.1**

## Applications

Pump vibration isolation  
Limited pipeline misalignment  
Potable water  
Raw water

## Product Attributes

Single sphere moulded rubber bellow  
Electro-plated galvanised steel flanges  
PN16 rated

## Approvals/Standards

Flanges to AS4087 Fig. B5 PN16

## Quality

ISO 9001 Quality  
Management Systems

Single sphere rubber bellows to isolate pump vibration and noise from the surrounding pipe work. Loose flanges allow for easy fitting and minor misalignment.

Pipe bellows consist of a rubber section moulded to shape and fitted with a rotatable stainless steel flange at each end for connection to flanged pipework.

### Applications

- Compensate for heat-generated expansions
- Compensate for the settlements of terrain or building structures\*\*
- Absorb machinery vibrations and reduce the noise they produce
- Soften the impact of water hammer
- Create disassembly joints
- Suitable for pressure or suction duty\*
- Can be fitted between tank and pipe work

**Note:**

- \*Vacuum application bellows must be installed in a neutral position.
- \*\* For buried service please see Hygrade

### Features

- Requires little space
- Absorbs axial, lateral and angular movement
- Safe, reliable and durable – maintenance free
- High capacity acoustic damping

### Accessories

- Expansion limit rods
- Other flange drillings
- Stainless steel flanges
- HDG flanges

### Testing

- Tested to three times rated pressure

### Technical Data

- Size Range: DN32 - DN600  
(other sizes available on request)
- Pressure Range: PN16  
(Up to PN40 available on request)
- Vacuum: partial vacuum possible\*
- Temperature Range: - 20 °C to +80 °C
- Flange Drilling: AS 4087 Fig. B5
- Pressure Tests: 3 times maximum rated pressure

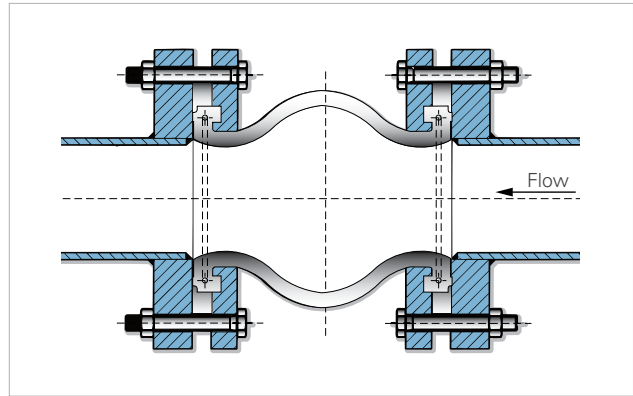


FIG. 1 Spherical moulded design

TABLE 1

No.	Description	Material
1	Cover	EPDM
2	Reinforcing Fabric	Nylon
3	Tube	EPDM
4	Retaining Rings	Stainless plated steel (standard)
5	Flange	Stainless plated steel (standard)

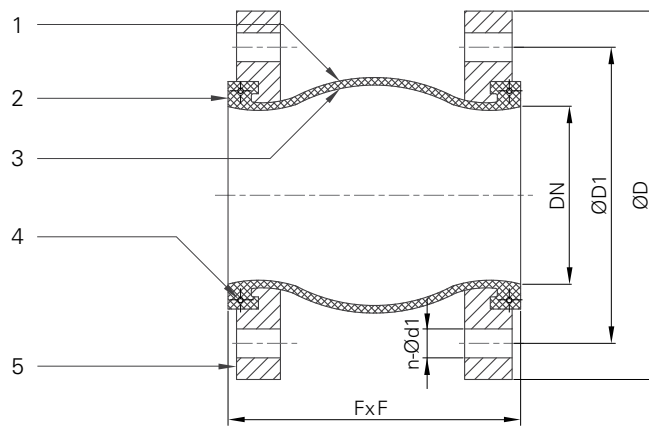


FIG. 2

TABLE 2 Product Range

Item Code	Dimensions				AS2129 Table E	AS4087 Fig. B5	Movements*			
	DN	FxF	ØD	ØD1	n-Ød1	n-Ød1	Axial Elong.	Axial Comp.	Lateral	Angular (°)
BR040AS4087	32	95	120	87	4-14		6	9	9	15
BR050AS4087	40	95	135	98	4-14		6	10	9	15
BR065AS4087	50	105	150	114	4-18		7	10	10	15
BR080AS4087	65	115	165	127	4-18		7	13	11	15
BR080AS4087	80	130	185	146		4-18	8	15	12	15
BR100AS4087	100	135	215	178		4-18	10	19	13	15
BR125AS4087	125	170	255	210	8-18		12	19	13	15
BR150AS4087	150	180	280	235		8-18	12	20	14	15
BR200AS4087	200	205	335	292		8-18	16	25	22	15
BR250AS4087	250	240	405	356		8-22	16	25	22	15
BR300AS4087	300	260	455	406		12-22	16	25	22	15
BR350AS4087	350	255	525	470		12-26	16	25	22	15
BR400AS4087	400	255	580	521		12-26	16	25	22	15
BR450AS4087	450	255	640	584		12-26	16	25	22	15
BR500AS4087	500	255	705	641		16-26	16	25	22	15
BR600AS4087	600	260	825	756		16-30	16	25	22	15

**Note:**



= Available on request. Indent.

\*Movements are not concurrent.

Maximum deflection in one plane may result in less deflection being available in all other planes.

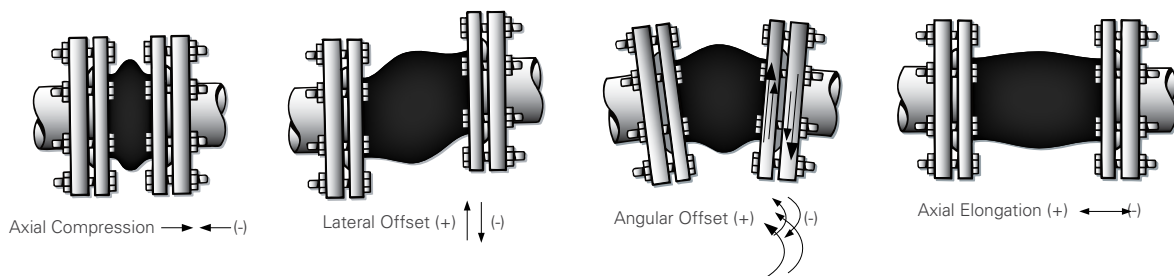
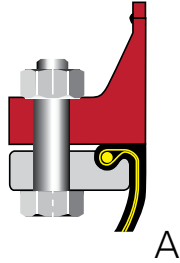


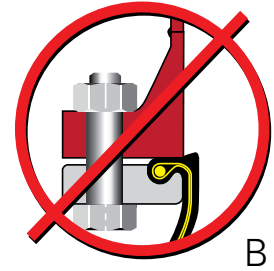
FIG. 3 Movements

## Joints with Beaded End Flanges

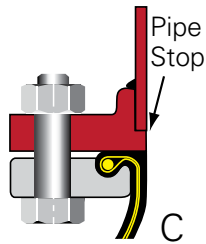
Right:  
Weld neck flanges with correct ID prevent damage to rubber.



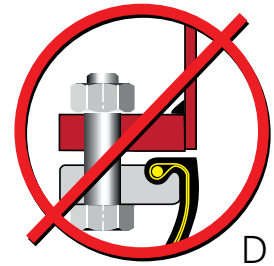
Wrong:  
Insure mating flange I.D. is flush with rubber.



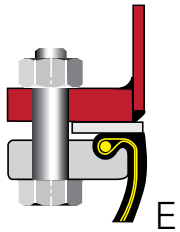
Right:  
Flanges with correct ID help prevent damage to rubber.



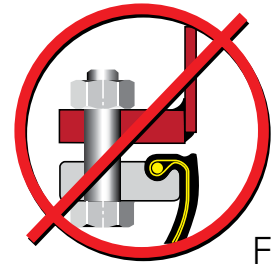
Wrong:  
Uneven end of pipe can cause damage to rubber.



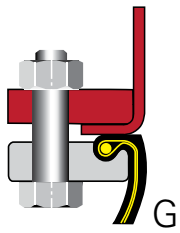
Right:  
In case of B, D, F an additional metal gasket can be used to prevent damage to rubber.



Wrong:  
Inner edge of flanges damages rubber.



Right:  
Well rounded smooth edge prevents damage to rubber.



Scan for more information

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