

# TIFT

# POWERFLEX

# Bellows and

# Expansion Joints

## Pressure

For all services up to the maximum working pressure given in the data tables.

## Test Pressure

1.5 times the working pressure. For requirements in excess of this please consult us.

## Temperature

The maximum working pressure of these joints should be reduced at elevated temperatures as follows :-

Temperature		Pressure	
°C	°F	bar	psi
100	212	25	363
200	392	22.3	323
250	482	21.5	312
300	572	21	305
400	752	20.2	293
450	842	19.6	284

## Movements

As given in the data tables.

## Installation

As detailed on the Installation Instruction Label attached to each joint. Axial movement joints are supplied at maximum extended length for ease of installation. Lateral movement joints should be installed 'Offset' in 'Cold Draw' position at fully extended length, at 90° to line of movement and the pipe must spring to allow for the increase in length of the unit as it crosses the centre of the arc between hot and cold position.

## MATERIAL AND END FITTING SPECIFICATIONS

### Bellows and Inner Sleeves

Stainless Steel BS 1449 Part 2 (1983) 321S31

### Tube Ends

Carbon Steel BS3601 or API5L Grade B.

Stainless Steel BS3605.

Dimensions to BS1600 'Standard Wall'.

### Flanges

Carbon Steel or Stainless Steel BS10, BS1560 or BS4504.

### Tie Bars, Shackles and Restraints

Carbon Steel to BS5500.

### Outer Protection Sleeves

Mild Steel (Optional).

### Anchor and Guides

Supplied by others to be used as advised in preceding pages under 'Guide to the use of "Powerflex" bellows and expansion joints'.

Ordering Information -- Nominal Bore, Type, End Finish, Application and Movement

# POWERFLEX Type RWA – RVA

Designed to accommodate axial movement

## Construction

**Type RWA** – Stainless steel bellows with stainless steel inner sleeves and mild steel welding tube ends.  
With or without outer protection sleeves.

**Type RVA** – As above, but with tube ends machined to suit victaulic couplings

Material specification – see page 11.

## Size Range

The standard size range is 15mm (½") to 200mm (8"). Larger sizes are available against enquiry.



Nominal Bore		Max. Working Pressure		Axial Movement		Force to Compress		Effective Area		Maximum extended length	
mm	ins	bar	psi	mm	ins	kg	lb	cm <sup>2</sup>	in <sup>2</sup>	mm	ins
15	½	25	363	12	½	33	73	3.26	0.506	124.4	4.90
				25	1					172.4	6.79
				50	2					335.5	13.21
20	¾	25	363	12	½	34	75	5.37	0.833	128.5	5.06
				25	1					173.9	6.85
				50	2					331.4	13.05
25	1	25	363	12	½	31	68	8.17	1.267	132.8	5.23
				25	1					179.0	7.05
				50	2					354.3	13.94
				75	3					446.7	17.59
32	1¼	25	363	12	½	75	165	13.30	2.061	136.6	5.38
				25	1					185.9	7.32
				50	2					362.0	14.25
				75	3					465.5	18.33
40	1½	25	363	12	½	75	165	17.63	2.717	141.4	5.57
				25	1					188.9	7.44
				50	2					380.0	14.17
				75	3					455.1	17.92
50	2	25	363	12	½	100	220	30.41	4.714	222.2	8.75
				25	1					272.2	10.72
				50	2					372.0	14.64
				75	3					471.6	18.57
65	2½	25	368	12	½	261	575	43.80	6.789	227.8	8.97
				25	1					265.9	10.47
				50	2					358.0	14.10
				75	3					450.8	17.75
80	3	25	363	12	½	205	450	62.78	9.731	233.4	9.19
				25	1					274.5	10.81
				50	2					375.0	14.77
				75	3					475.7	18.73
100	4	25	363	25	1	303	670	107.70	16.69	266.7	10.58
				50	2					362.0	14.25
				75	3					455.4	17.93
125	5	25	363	25	1	616	1360	162.91	25.25	271.0	10.67
				50	2					353.0	13.90
				75	3					445.5	17.54
150	6	25	363	25	1	1104	2435	227.50	35.36	265.0	10.43
				50	2					339.4	13.36
				75	3					424.9	16.73
200	8	16	232	25	1	1139	2510	385.30	59.72	304.1	11.97
				50	2					371.7	14.63
				75	3					469.0	18.46
200	8	25	363	25	1	1878	4140	385.30	59.72	304.1	11.97
				50	2					371.7	14.63
				75	3					469.0	18.46