RBM FLEX

RUBBER EXPANSION JOINTS

RBM FLEX's rubber expansion joints are preferred in large variety of industrial applications with their outstanding features likewise movement absorption in all plates and great vibration damping abilities.

RUBBER EXPANSION JOINTS

Symbols For Product Features And Quick Selection


Axial Expansion Joint


Lateral Expansion Joint


Angular Expansion Joint


3D Movement

Threaded Connection

Max. Product Pressure

Flange Standards

Max Product Temperature


Flame-proof


Seismic Expansion Joint


Suitable for gaseous media


Resistant to hot water


Suitable for noise absorption


Suitable for vibration absorption


Suitable for Oil media


Suitable for drinking water


Suitable for seawater

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Application Areas and Purposes

RBM FLEX's Rubber Expansion joints are used in various areas such as;

- Mechanical installation and machine engineering.
- Domestic water and liquid industry.
- Shipbuilding and marine engineering.
- Power plants and nuclear stations.
- HVAC applications.

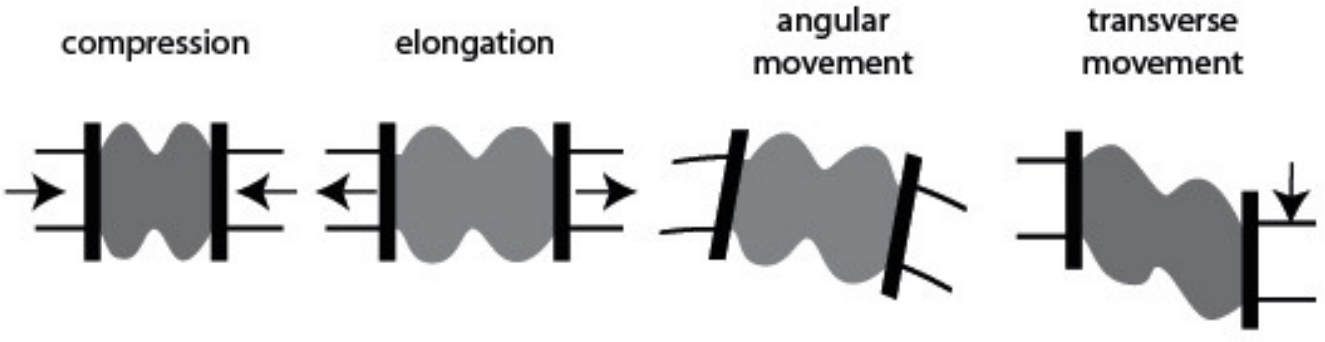
Main purposes of using rubber expansion joints may be considered as follows;

- To compensate thermal expansion and compression.
- To reduce tension in the pipelines.
- To prevent noise and vibration to protect the connected systems.
- To compensate for ground, and settlement of especially the new buildings.
- To provide proper sealing with their elastic structures where the pipelines pass through walls.

Design

- RBM FLEX rubber expansion joints provide excellent compensating features by their highly rated rubber bellows which is consisted of special synthetic rubber, steel wire and nylon braid fibre.
- They may be produced with flange and threaded connections.
- They may have two bellowed structure in order to absorb large movements.

RBM FLEX's Rubber expansion joints are designed to compensate axial, lateral, angular and transverse movements at the same time.



3D PN 16 MAX. +90°C

Expansion Joint Twin Spehere, Threaded Ends PN10 CODE S30

Union flange qualities

Zinc plated threaded ends. Also available with stainless steel (SS304) under request.

Union

BSP (standard) or NPT (under request).

Applications

RBM FLEX are recommended in small diameter pipes, pumps and equipments because most connection in housing and industries services are often required in screwed connection rather then flanges for small diameter installations.
Excellent for applications where large lateral or angular movements arise.
Typical applications could be pumps (suction and discharge line), air-condition systems and irrigations

Design

The style RBM FLEX surewed union expansion joints are designed to absorb pipe movements, stress, isolate vibrations, reducing system noise and protect against start up and surge force.
The RBM FLEX are designed in twin sphere because its proven absorption and flexibility in all directional movements during opertion.
By combination of spherical structure with super stability against internal pressure and strong special reinforcement the RBM FLEX bar bursting pressure or above at normal temperature.
The metal parts, made of malleable cast iron and zinc plated, are furnished with BSP threads as standared. Also available in stainless steel and/ or NPT threaded unions.

Materials

Colour Label	Inner tube	Outer cover	Max temp. °C	Applications
Black & TU	EPDM	EPDM	80°	Water, warm water, sea water, air and weak acids.

Note: Other material available. Please ask.

Diam.		Length	Allowable Movement				Weight
MM	INCH	MM	Axial Compression(r) MM	Axial Elongation (s) MM	Transverse Deflection (t) MM	Angular Deflection (hk)	KG
D	D	TL					
15	1/2"	200	22	6	22	30°	0.50
20	3/4"	200	22	6	22	30°	0.70
25	1"	200	22	6	22	25°	1.00
32	1-1/4"	200	22	6	22	25°	1.20
40	1-1/2"	200	22	6	22	20°	1.70
50	2"	200	22	6	22	15°	2.60
65	2-1/2"	240	22	6	22	15°	3.50
80	3"	240	22	6	22	15°	4.50

Specification:

Rubber expansion joint, Reinforced Neoprene Rubber, Threaded end connections to BS 21 (with unions), Electro-Galvanized.

Hydrostatic Test Pressure:

Body : 15 bar

Burst Pressure:

50 bar at 20 deg.C

Pressure / Temperature Rating:

10 bar at 60 deg.C
6 bar at 80 deg.C
3 bar at 90 deg.C

Maxm. allowable short term tempr' 100 deg.C
Maxm. vacuum rating 400 mm Hg

On request (forward delivery):

RBM FLEX expansion joints can also be supplied with NPT threads.

Note:

For higher pressures (PN16) and excessive movements we strongly recommend the use of root ring and clamp / tie rod assembly along with our RBM FLEX Expansion Joints.