

FLEXIBLE FLANGED EXTENSION JOINT

ANTOMEX-B



PN 10,16, 25
DN 25 - DN 600

EPDM STEEL REINFORCED RUBBER BODY
S235JR HOT DIP GALVANISED FLANGES

PRODUCTION STANDARDS

DESIGN	DIN 30680
END CONNECTION	EN 1092-1 / ISO 7005-1
FACE TO FACE	EN 558-1

FEATURES

- Flexible joint removes vibration and noise that occurs and transmitted along the line on pipeline facilities due to EPDM rubber body.
- Provides tolerance that exposed temperature differences arising from expansion and contraction in pipe lines.
- Allows balancing of the pipeline lateral and angular movements.
- Contribute to the absorption of the water hammer from the system.
- Gasket and joint are not needed for installation.
- Provides easy installation due to rotary flanges.
- It is manufactured EPDM rubber as standard, it can be used NBR rubber if required.
- It can be supplied as various pressure class flanges.

APPLICATIONS

Hot Water, Cold Water, Industrial Applications

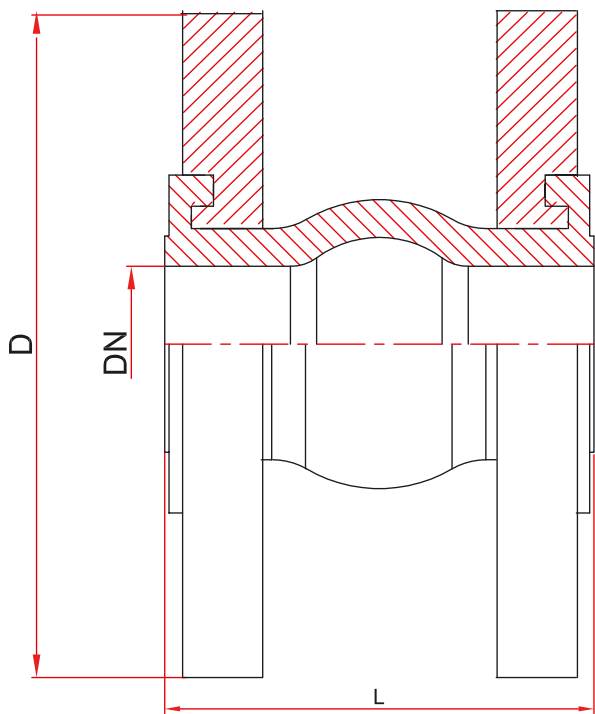
TEMPERATURE

-40, +130 °C

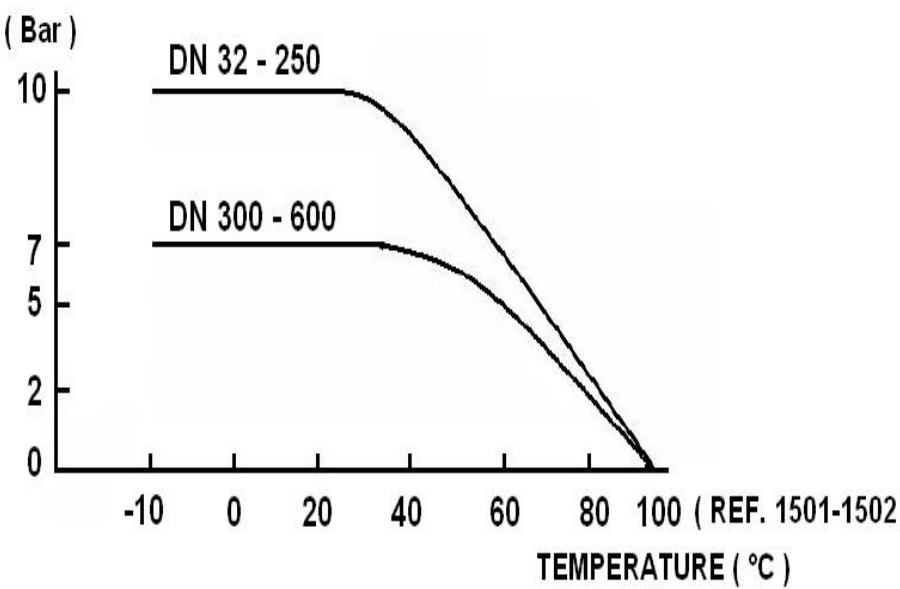
TECHNICAL DRAWING

MATERIAL SELECTION

BODY	STEEL REINFORCED EPDM
FLANGE	CARBON STEEL S235JR
COATING	HOT DIP GALVANISED
SEALING	EPDM
EXPANSION	Axial + 15mm - 20 mm / Radial 15mm / Angular 15°

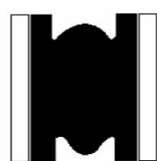


PRESSURE - TEMPERATURE GRAPH (STEAM EXCLUDED)



DN	DIMENSIONS		RATINGS		STUD SIZE	BOLT/NUT QTY	FASTENING TORQUE Nm	WRENCH SIZE (mm)
	mm	D	L	Pressure Bar	Weight kg			
25	115	90	16	2,3	M12X60	4X2	85	19
32	140	95	16	3,7	M16X60	4X2	205	24
40	150	95	16	3,8	M16X60	4X2	205	24
50	165	105	16	4,7	M16X60	4X2	205	24
65	185	115	16	5,6	M16X60	4X2	205	24
80	200	130	16	7,1	M16X65	8X2	205	24
100	220	135	16	7,5	M16X65	8X2	205	24
125	250	170	16	10,8	M16X70	8X2	205	24
150	285	180	16	12,5	M20X75	8X2	400	30
200	340	205	16	16,7	M20X80	12X2	400	30
250	405	240	16	18,5	M24X90	12X2	691	36
300	460	260	16	29,2	M24X90	12X2	691	36
350	520	265	16	46	M24X100	16x2	691	36
400	565	265	10	48	M24X110	16X2	691	36
450	615	265	10	51	M24X110	20X2	691	36
500	670	265	10	57,0	M24X120	20X2	691	36
600	780	265	10	70,0	M27X130	20x2	1010	41

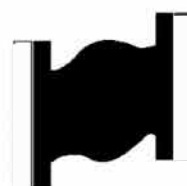
POSSIBLE MOVEMENTS



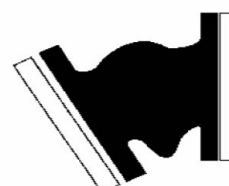
Compansion



Expansion



Lateral



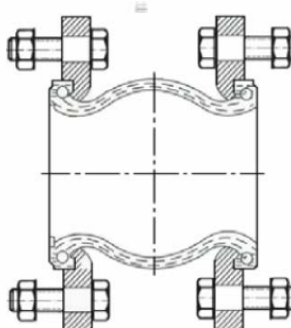
Angular

DN	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Compansion	8	8	8	12	12	18	18	18	25	25	25	25	25	25	25	25
Expansion	4	4	5	6	6	10	10	10	14	14	14	16	16	16	16	16
Lateral	8	8	8	10	10	12	12	12	22	22	22	22	22	22	22	22
Angular	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°

INSTALLATION GUIDE

Expansion joint are designed for the absorption of previously specified movements under specific pressure and temperature conditions. So that the maximum service life is achieved, the following items must be observed during installation.

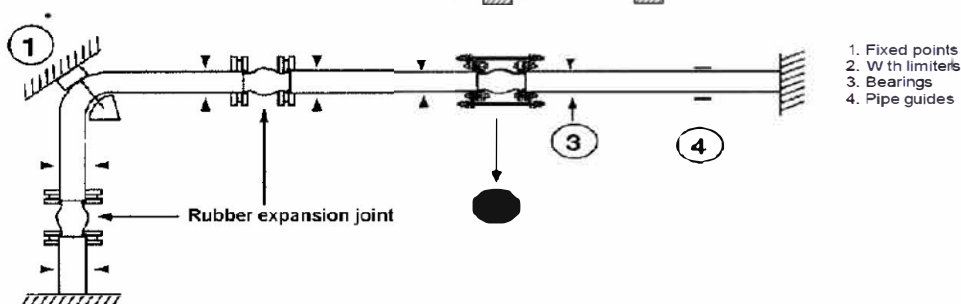
- Prior to fitment of the compensator it must be ensured that :
 - The route of the pipeline is straight - The expansion tallies with that of the chosen compensator
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 - The fixes points are dimensionned so that they can absorb the reaction forces and stiffness rate that arise during use.
 - The pipeline is limited by fixed points
 - The distance between compensator and bearing may be a maximum of 3 times the pipe diameter. Place only one compensator between 2 bearings.
- Each pipe elbow must be fixed by support, specially if compensator is mounted with limiters.
- Fixed bearings are necessary because compensator is submitted to expansion when it is under pressure.
- Expansion joint must not be painted and heat-insulated. It must be protected from bad weather and solar radiation.
- During assembly operation, make sure screws are oriented according to the graph out below :



Please apply the following stages order :

- a) Fixed points for above pipeline
- b) Fixed points for down pipeline
- c) Compensator mounting

Installation layout :



Check that the compensator is not subjected to the weight of the pipeline. The installation lenght must agree with the installation gap. The compensator must never be twisted. It is recommended that specific characteristics be observed during maintenance :

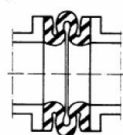
- The compensator must never be painted or recovered by heat insulation
- The tightness of the bolts must be checked often.
- The flanges must be perfectly cleared

Use limiters : When the working pressure can exceed the following values :

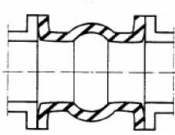
- Up to DN100 : 10 bars
- From DN125 to DN250 : 9 bars
- From DN300 to DN350 : 6 bars
- From DN400 to DN600 : 3 bars
- When there is some risk of high pressure (pump starting) or high temperature.

NOTA : The life of compensator can vary because of working conditions (fluids, pressure, temperature), that is why it is necessary to check it regularly.

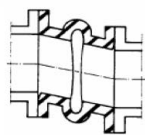
WRONG INSTALLATION :



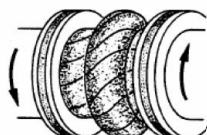
Excessive compression



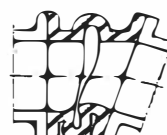
Excessive expansion



Cutting too important



Torsion



Important compression and angular deviation



Angular deviation too important