



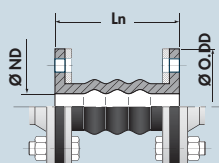
DILATOFLEX® NT

Rubber Bellows Expansion Joints - Flexible Pump Bellows Compensators

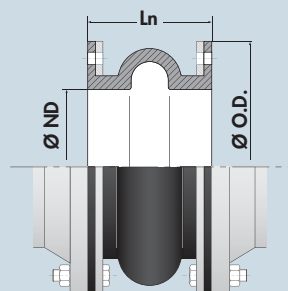
Inner lining grades

	NT	NT 1	NT 2
CC Green label	✓	✓	✓
EPC Cream label	✓	✓	✓
ES Steel carcass		✓	✓
AR / CN Red label	✓	✓	✓
GZ Orange label	✓	✓	✓
YP Yellow label	✓	✓	✓
AB Grey label	✓	✓	✓
TE Mauve label	✓	✓	✓

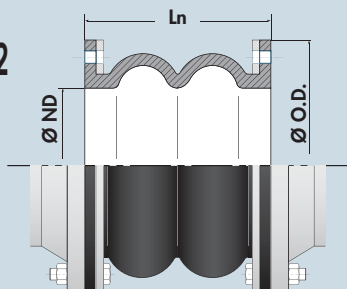
NT



NT 1



NT 2



Example of Label



DIMENSIONAL DATA					TECHNICAL DATA									
Nominal Diameter		Nominal length (Ln in mm)	O.D. (mm)			Max. permissible pressure (bar) (2) (3) (4)	Steel ring required for vacuum greater than ... %	Max. Permissible Movements (not concurrent)				End thrust in daN for P= 1 bar	Axial stiffness in daN at no pressure for 1cm axial displacement	Approx. weight in kg (below only) (5)
ND	NPS		Drilling standards (1)					Axial	Lateral	Angular				
			ISO 2084 NF EN 1759-1 NF EN 1092-1					 Compression mm	 Elongation mm	 Lateral mm	 Angle α° degree			
mm	inch	PN 10	PN 16	class 150 (PN 20)										
TYPE NT DN20 / DN25 / DN32 STILL AVAILABLE														
20	3/4	150	105	105	12	-	12	8	10	30	4.0	62	0.4	
25	1	150	115	115	12	-	15	8	10	25	6.0	70	0.4	
32	1 1/4	150	140	120	12	-	15	8	10	20	8.5	85	1.4	
TYPE NT1 NO LONGER MANUFACTURED - SEE REPLACEMENT TYPE T														
40	1 1/2	150	150	130	16	-	30	20	15	20	48	8	1.1	
50	2	150	165	165	16	-	30	30	15	20	80	13	1.3	
65	2 1/2	150	185	185	16	-	30	30	15	20	115	23	1.6	
80	3	150	200		16	-	30	30	15	20	138	34	1.9	
100	4	150	220	229	16	50	30	30	15	20	190	38	2.4	
125	5	150	250	250	16	50	30	30	15	10	270	42	2.5	
150	6	150	285	285	16	50	30	30	15	10	370	49	3.0	
175	7	150	315		16	50	30	30	15	10	445	57	3.6	
200	8	150	340	340	16	50	30	30	15	10	560	58	4.0	
225	9	150	370		16	50	30	30	15	10	700	60	4.6	
250	10	200	405	405	16	50	25	30	30	9	800	55	8.0	
300	12	200	460	485	16	50	25	30	30	8	1000	65	10.0	
350	14	200	520	533	16	50	25	30	30	7	1300	75	11.5	
400	16	200	580	597	16	50	25	30	30	6	1700	85	14.0	
450	18	200	640	640	16	50	25	30	30	5	2000	95	15.0	
TYPE NT2 NO LONGER MANUFACTURED - SEE REPLACEMENT TYPE T2														
250	10	300	405	405	16	30	60	60	45	25	800	34	11.0	
300	12	300	460	485	16	30	60	60	45	22	1100	34	13.0	
350	14	300	520	533	16	30	60	60	45	18	1500	34	15.0	
400	16	300	580	597	16	30	60	60	45	16	1900	44	17.0	
450	18	300	640	640	16	30	60	60	45	14	2400	44	19.0	

(1) Other drillings available (e.g. PN6, PN25, PN40, BS10 Table E...). Please consult us.

(2) CC rubber grade : max. operating conditions : Pressures as listed above @ 90°C ; 10 Bar @ 110°C.

(3) ES rubber grade : max. operating conditions : 25 Bar @ 70°C ; 16 Bar @ 140°C.

(4) Limited to the nominal pressure of the drilling standard being used.

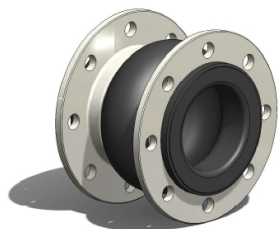
(5) Expansion joints to be mounted with steel backing flanges in 2 parts (zinc-plated, hot-dip galvanized or stainless steel).

Distributor :

Mercia Flexibles • www.merciaflexibles.co.uk

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DILATOFLEX®

Rubber Bellows Expansion Joints - Flexible Pump Bellows Compensators

DILATOFLEX TYPE T

The best among expansion joints

Rubber Bellows Expansion Joints - Flexible Pump Bellows for Pipework for Anti-Vibration, and the Absorption of Movement and Thermal Expansion in Pipelines

CC	16 bar - 90°C
AR/CN	10 bar - 110°C
GZ	16 bar - 90°C
TE	
YP	
AB	16 bar - 100°C
EPC	
DW	16 bar - 90°C
	12 bar - 105°C

The expansion joint Type T allows big displacement, high resistance to pressure and a very good behaviour in exceptional conditions.



Drinking water agreement Grade DW



25 bars @ 55°C possible on request with model DIL-TP.

Example of label:



Range of diameters:

ND 32 - 40 - 50 - 65 - 80 - 100 - 125
150 - 200 - 250 - 300 - 350 mm

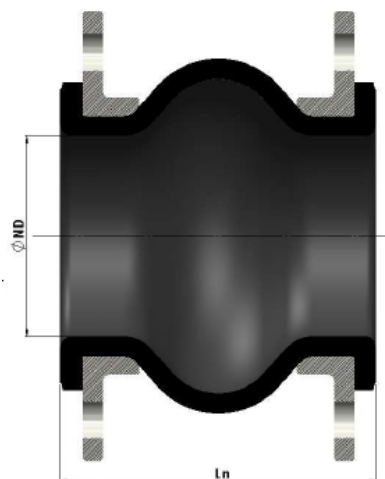
Lengths :

DN 32 to 200 : 150 mm
DN 150 to 350 : 200 mm

Working conditions:

Displacements		Normal*
AXIAL	Compression	30 mm
	Elongation	30 mm
LATERAL		20 mm

*normal conditions : 1 x 10⁶ cycles



Angular displacement												
DN (mm)	32	40	50	65	80	100	125	150	200	250	300	350
Normal (°)	20	20	20	20	20	20	10	10	10	10	10	9

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AN EFFICIENT SOLUTION FOR A WIDE RANGE OF APPLICATIONS

BUILDING INDUSTRY

- ▶ Central heating and air conditioning
- ▶ Hot and cold water systems
- ▶ Fire extinction systems

POWER GENERATION

- ▶ Cooling systems, pumping stations, etc. for conventional and nuclear power plants

PETROLEUM INDUSTRY

- ▶ Cooling systems
- ▶ Fuel handling

NAVAL CONSTRUCTION

- ▶ Machine cooling systems
- ▶ Sanitary installations
- ▶ Fire extinction systems
- ▶ Fuel handling

METALLURGY

- ▶ Blast furnace gas
- ▶ Compressed air
- ▶ Industrial water systems

WATER TREATMENT

- ▶ Production and distribution of drinking water, waste water treatment

FOOD INDUSTRY

- ▶ Drinking water and other beverage and foodstuff handling systems

CHEMICAL INDUSTRY

- Fluid handling systems:
- ▶ acids, bases, hydrocarbons, emulsions, solutions, air, gas, steam, water, etc.

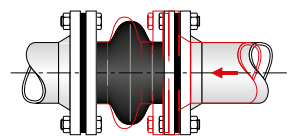
Lining Grade Identification colour and designation	Typical Applications	W.T. Working temperatures
Green label CC	▶ Central heating and air conditioning water	-35 °C +90 °C/ 110 °C
Blue label DW	▶ Drinking Water Approved ▶ Domestic cold and hot water	-25 °C +90 °C/ 105 °C
Cream label EPC	▶ Food products ▶ White Food Grade liner ▶ Option Stainless Steel flanges	-25 °C +95 °C
White label ES	▶ Steel Mesh Reinforced ▶ Superheated water ▶ Hot water vapour	-35 °C +140 °C
Red label AR/CN	▶ Abrasive or corrosive products (weak acids and bases) ▶ Industrial water, sea water ▶ Low-temperature water vapour	-35 °C +90 °C
Orange label GZ	▶ Gas, compressed air, fuel, oil ▶ Petroleum products with aromatic content < 40% ▶ Sanitation water	-20 °C +90 °C
Blue label HH	▶ Industrial and waste water ▶ Hydrogen gas, nitrogen	-20 °C +90 °C
Yellow label YP	▶ Strong acids ▶ Strong bases ▶ Aggressive chemicals	-25 °C +100 °C
Grey label AB	▶ Strong acids ▶ Strong bases ▶ Weak chlorinated products	-35 °C +100 °C
Mauve label TE	▶ Industrial water ▶ Acidic water ▶ Diluted acids and bases	-25 °C +100 °C
White label F1	▶ Special highly aggressive products (Working pressure limited to 6 bar max.)	-35 °C +110 °C



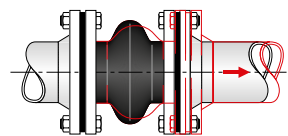
The inner lining to be used for a specific fluid (composition, concentration, temperature, etc.) should be selected according to our Chemical Resistance Chart.

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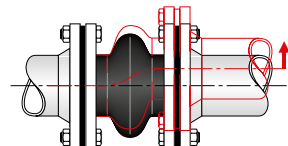
Operating Principles



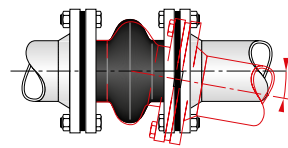
AXIAL COMPRESSION



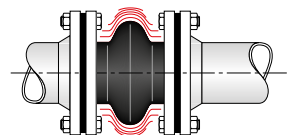
AXIAL ELONGATION



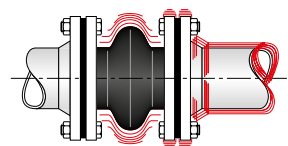
LATERAL DEFLECTION



ANGULAR DEFLECTION



WATER HAMMER REDUCTION



ELIMINATION OF VIBRATION