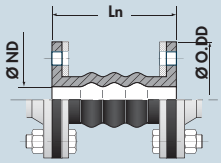
DILATOFLEX® NT

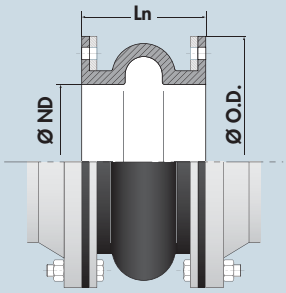
P.E.D. 97/23/CE Cat. III

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	☑	☑	☑

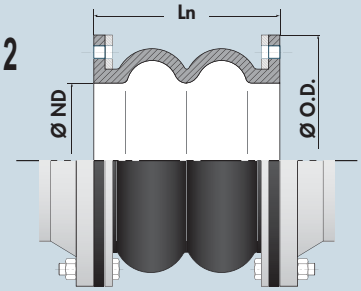
NT



NT 1



NT 2



DIMENSIONAL DATA						TECHNICAL DATA								
Nominal Diameter			O.D. (mm) Drilling standards (1)					Max. Permissible Movements (not concurrent)						
			ISO 2084 NF EN 1759-1 NF EN 1092-1					Axial		Lateral	Angular			
ND mm	NPS inch	Nominal length (Ln in mm)	PN 10	PN 16	class 150 (PN 20)	Max. permissible pressure (bar) (2) (3) (4)	Steel ring required for vacuum greater than ... %	Compression mm	Elongation mm	Lateral mm	Angle α° degree	End thrust in daN for P= 1 bar	Axial stiffness in daN at no pressure for 1cm axial displacement	Approx. weight in kg (bellow only) (5)
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.

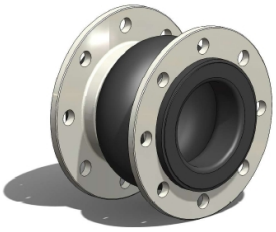
(4) Limited to the nominal pressure of the drilling standard being used.

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

Example of Label

Distributor :

Mercia Flexibles • *www.merciaflexibles.co.uk*
Ludlow Eco Park • Ludlow • Shropshire • SY8 1FF • United Kingdom
Tel: +44 (0)1584 874999 • Email: dilatoflex@merciaflexibles.co.uk



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* *10 bar - 110°C*
AR/CN	*16 bar - 90°C*
GZ	*16 bar - 90°C*
TE	*16 bar - 100°C*
YP	*16 bar - 100°C*
AB	*16 bar - 100°C*
EPC	*16 bar - 95°C*
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:

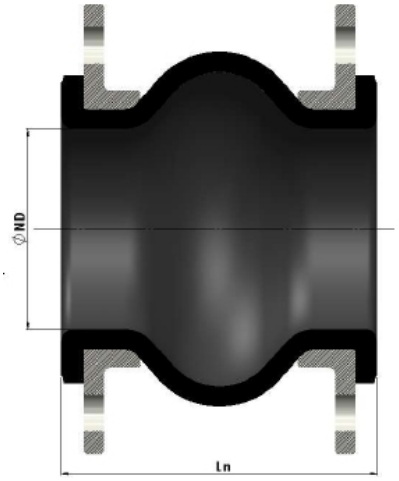
Range of diameters:

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

Working conditions:

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

*normal conditions : 1 x 10^6 cycles



Lengths :

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

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

Distributor:

Mercia Flexibles • *www.merciaflexibles.co.uk*

Unit 19 FlexSpace Enterprise Centre • Ludlow Eco Park • Ludlow • Shropshire • SY8 1FF • United Kingdom
Tel: +44 (0)1584 874999 • Email: dilatoflex@merciaflexibles.co.uk

DILATOFLEX

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

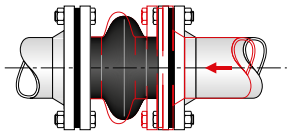
FOOD INDUSTRY
- Drinking water and other beverage and foodstuff handling systems

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

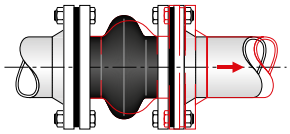
Lining Grade Identification colour and designation	Typical Applications	W.T. Working temperatures	
Green label | CC	▶ Central heating and air conditioning water	-35 °C	+90 °C/ 110 °C
Blue label | DW	▶ Drinking Water Approved ▶ Domestic cold and hot water	-25 °C	+90 °C/ 105 °C
Cream label | EPC	▶ Food 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 agressive products (Working pressure limited to 6 bar max.) PTFE liner	-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.

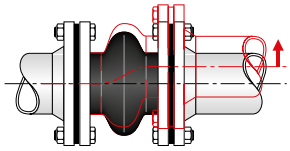
Operating Principles



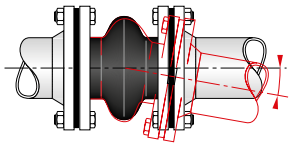
AXIAL COMPRESSION



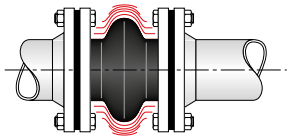
AXIAL ELONGATION



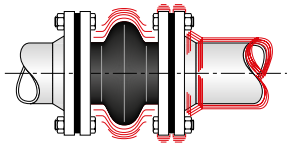
LATERAL DEFLECTION



ANGULAR DEFLECTION



WATER HAMMER REDUCTION



ELIMINATION OF VIBRATION

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