INTERFLEX HOSE & BELLOWS Ltd.

Units 19/20 FlexSpace Enterprise Centre
Ludlow Eco Park
Ludlow
Shropshire. SY8 1FF.
United Kingdom

Tel. : +44 (0)1584 878500
Email : dilatoflex@interflex.co.uk
Internet : www.interflex.co.uk

DILATOFLEX TYPE K and T

Rubber Bellows Expansion Joints / Flexible Pump Compensators

- Grade CC Rated for 16 BarG @ 90 ºC, and 10 BarG @ 110 ºC.
- Manufactured within the European Union.
- Type Approved

DILATOFLEX® K

AUTOSTABLE

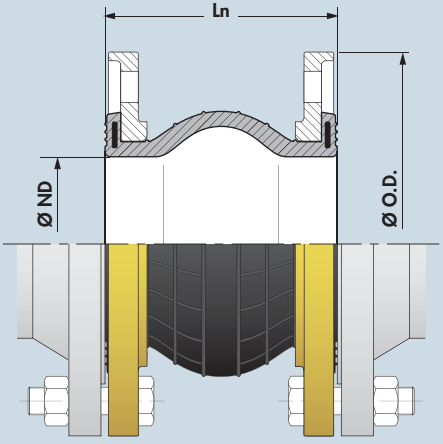
P.E.D. 97/23/CE Cat. III

CC (NF) Green label
GZ Orange label
EPC (NF) Cream label
YP Yellow label
AR / CN Red label
TE Mauve label
DW (NF) Blue label

Inner lining grades

F1 White label — PTFE liner

** see separate technical sheet*



Example of Label

DIMENSIONAL DATA						TECHNICAL DATA							
Nominal Diameter		Nominal length (Ln in mm)	O.D. (mm) Drilling standards (1)			Max. permissible pressure (2) bar		Steel ring required for vacuum greater than ...%	Max. Permissible Movements (not concurrent)				
			ISO 2084 NF EN 1759-1 NF EN 1092-1						Axial		Lateral	Angular	
ND mm	NPS inch		PN 10	PN 16	class 150 (PN 20)	T ≤ 100 °C	T > 100 °C		Compression Ln - Lc mm	Elongation Le - Ln mm	Shearing R mm	angle α° degree	... AUTOSTABLE ... at its equilibrium length (Lq in mm)
32	1 1/4	130	140		-	16	10	-	25	10	15	20	130
40	1 1/2	130	150		130	16	10	-	25	10	15	20	130
50	2	130	165		165	16	10	30	25	10	15	20	130
65	2 1/2	130	185		185	16	10	30	25	10	15	20	130
80	3	130	200		200	16	10	30	25	10	15	17	130
100	4	130	220		220	16	10	30	25	10	15	14	135
125	5	130	250		250	16	10	30	25	15	15	14	140
150	6	130	285		285	16	10	30	20	15	15	10	140
200	8	130	340		340	16	10	30	20	20	15	10	145
250	10	130	405		405	16	10	30	15	25	15	8	150
300	12	130	445	460	485	16	10	30	15	30	15	7	155

Approx. weight in kg (steel flanges PN10 / PN16)
3.0
3.4
4.0
4.7
5.0
6.2
7.7
10.0
12.2
16.7
20.0

(1) Other drillings available (e.g. PN6, PN25, BS10D-E…)
Floating flanges in zinc-chromated, hot dip galvanized or stainless (304L or 316L) steel

(2) ***DW grade:*** *W.P. 12 bar at 105°C max. for the whole range.*
Its lining grade is homologated A.C.S. (sanitary conformity certification)
It falls into art. 1 item 3.2 of the PED 97/23/CE.

Grade CC WP : 16 BarG @ 90 °C / 10 BarG @ 110 °C.

Technical Sheet
AFD-TS- 002/2 from 2008 - 03 - 07

We reserve the right to change our products' specifications when necessary without notice.

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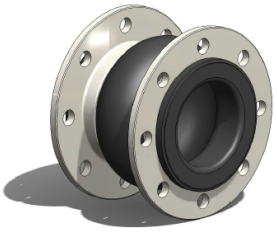


DILATOFLEX®

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* / *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

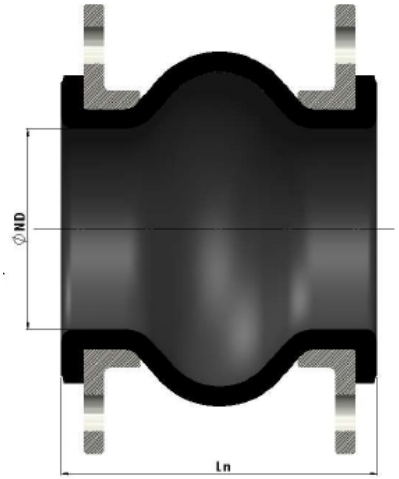
25 bars @ 55°C possible on request with model DIL-TP.

Example of label:

Working conditions:

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

*normal conditions : 1 x 10^6 cycles



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

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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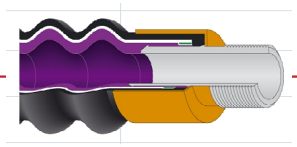
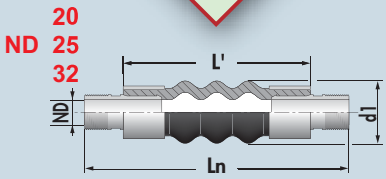
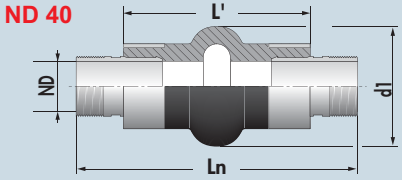
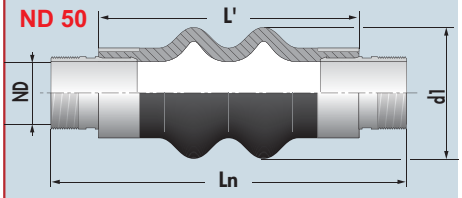
DILATOFLEX KLEDIL®

Threaded Flexible Rubber Pump Bellows









DIMENSIONAL DATA						TECHNICAL DATA								
Nominal Diameter		BSPT Male Thread		O.D.				Max. Permissible Movements (not concurrent)						
								Axial		Lateral	Angular			
ND mm	NPS inch	(*) former designation		d1 mm	L' mm	Ln mm	Max. permissible pressure (bar) (1)	Max. permissible vacuum (% vacuum)	Compression Ln - Lc mm	Elongation Le - Ln mm	Shearing R mm	angle α° degree	Thrust in daN for P= 1 bar	Axial Stiffness at zero pressure in daN for 1cm axial movement	Approximate weight/Kg
20	3/4	R 3/4"	(20x27)*	50	160	220	12	100	15	8	10	0	3	50	0.45
25	1	R 1"	(26x34)*	55	160	220	9	100	15	8	10	0	4	60	0.55
32	1 1/4	R 1 1/4"	(33x42)*	66	160	230	9	100	15	8	10	0	9	95	0.80
40	1 1/2	R 1 1/2"	(40x49)*	94	160	230	7	70	10	10	6	0	13	130	0.95
50	2	R 2"	(50x60)*	105	210	290	7	70	30	30	15	0	42	40	1.50

(1) DW grade = max. operating capabilities are W.P. 8 bar at +105 °C.

Example of Label

KLEDIL® CC

Inner lining grade	BSPT Male Thread	
CC Green label	Steel	< HVAC & Industrial Water
DW Blue label	Stainless steel	< Drinking Water Approved
EPC Cream label	Stainless steel	< Food Grade Approved
GZ Orange label	Steel	< Oils, Gas & Fuels

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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

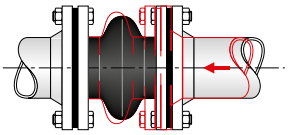
FOOD INDUSTRY
- Drinking water and other beverage and foodstuff handling systems

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

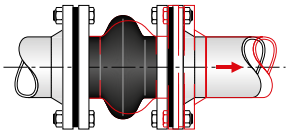
Lining Grade Identification colour and designation	**Typical Applications**	**W.T.** Working temperatures	
Green label | CC	▶ Central heating and air conditioning water	-35 °C	+90 °C/ 110 °C
Blue label | DW	▶ Drinking Water Approved ▶ Domestic cold and hot water	-25 °C	+90 °C/ 105 °C
Cream label | EPC	▶ 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 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. For special working conditions, please consult us.

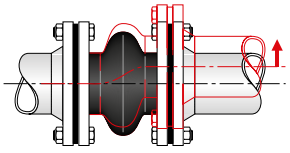
Operating Principles



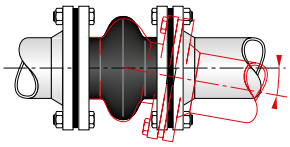
AXIAL COMPRESSION



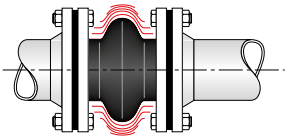
AXIAL ELONGATION



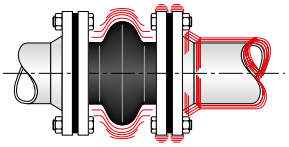
LATERAL DEFLECTION



ANGULAR DEFLECTION



WATER HAMMER REDUCTION

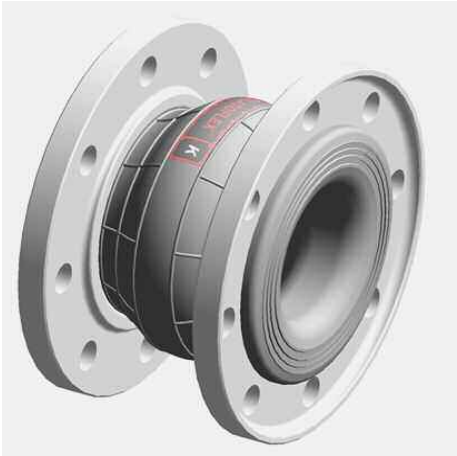


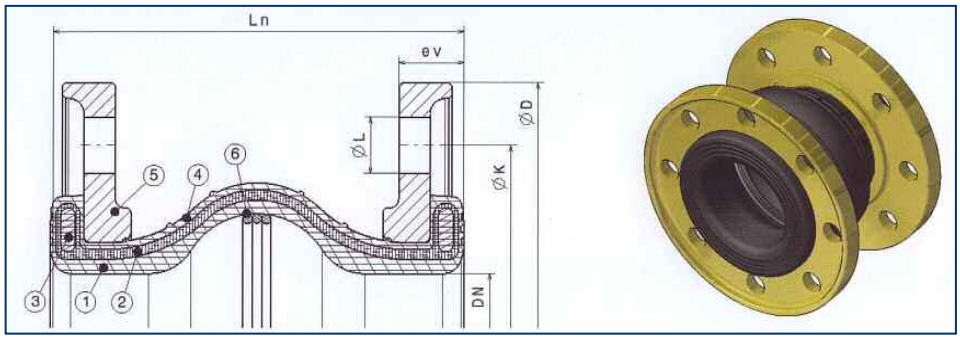
ELIMINATION OF VIBRATION

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

Options :

- Stainless Steel Flanges
- Tied and Hinged Versions
- Vacuum Rings
- Food Grade EPC and Potable Water Grade DW Versions
- High Pressure Type KP Rated for 25 BarG @ 55 ºC
- Other Rubber Grades for Chemicals, Oils, etc.
- Type K1 with PTFE Internal Liner
- Flame Guards
- Double Sphere Type K2 & T2





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