

# Teguflex® Expansion Joints



TEGUFLEX®, one the leading names of rubber expansion joints, offers solutions for your pipe system regarding thermal elongation, misalignments, vibrations, and noise reduction.

This catalog shows TEGUFLEX® standard range, rubber bellows with turnable flanges that combine elastic properties of rubber with various types of reinforcement to provide a flexible pipe joint that is easy to install and provides good performance and long service life.

Don't you find here what you need? Please contact us, we can also offer other diameters and other building lengths; flanges with other drillings or materials; full-faced flanges; full vacuum, FEP lining, safety shields or flame guards.

REACH compliant	RoHS compliant	PED compliant
ISO 9001	ISO 14001	ISO 45001

The trademark Teguflex is the property of the Trelleborg Group.

Trelleborg is a world leader in engineered polymer solutions that seal, damp and protect critical applications in demanding environments. Its innovative solutions accelerate performance for customers in a sustainable way.

[WWW.TRELLEBORG.COM](http://WWW.TRELLEBORG.COM)

Scan here to view more product information



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**TEGUFLEX®**  
Expansion joints  
[www.trelleborg.com/fluidhandling](http://www.trelleborg.com/fluidhandling)

TRELLEBORG FLUID HANDLING SOLUTIONS

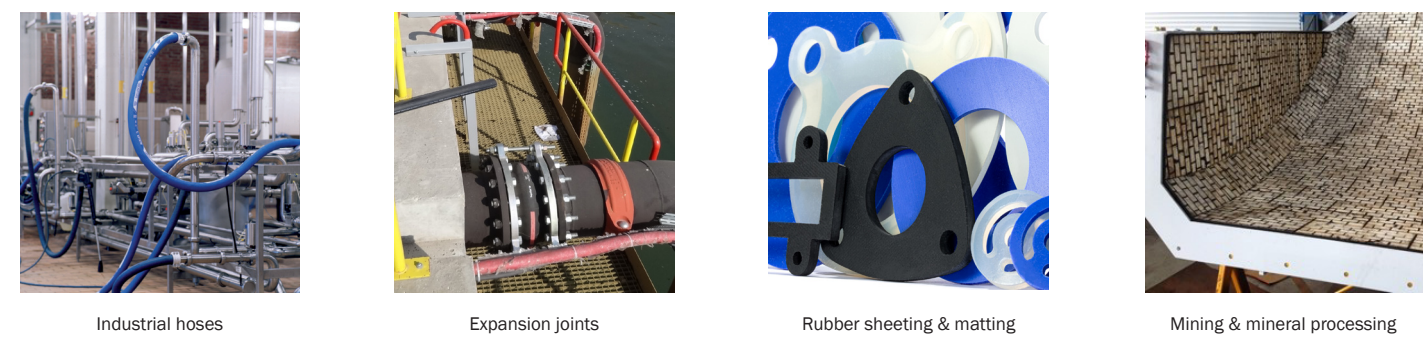
# TRELLEBORG GROUP LEADER IN POLYMER SOLUTIONS

**Trelleborg** is a world leader in engineered polymer solutions that seal, damp and protect critical applications in demanding environments. Its innovative engineered solutions accelerate performance for customers in a sustainable way.

**Trelleborg Fluid Handling Solutions** is a key supplier focusing on fluid handling technologies as well as material protection in demanding areas. With over 1,500 employees, located in Europe, Turkey, Australia and China.

The Trelleborg Fluid Handling team provides high-performance solutions for oil transfer for marine applications, fluid handling systems in industrial applications and full material and equipment protection in the mining industry.

Trelleborg Fluid Handling Solutions develops, designs, and manufactures low and medium-pressure hoses with their fittings, filtration for industrial applications, rubber sheeting and matting, expansion joints and wear protection lining equipment based on advanced polymer technology.



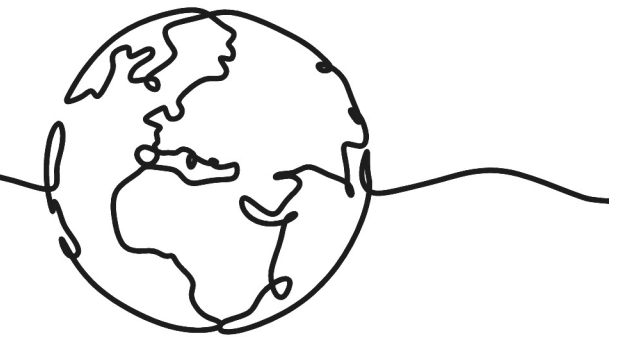
Industrial hoses      Expansion joints      Rubber sheeting & matting      Mining & mineral processing

With Trelleborg's material expertise and industry insight into cutting-edge areas with rigorous requirements, such as the aerospace and automotive industries, as well as healthcare & medical, the Group is creating the sustainable industrial solutions of today, shaped by such trends as electrification, digitalization, industrial automation and new sustainable materials.

The solutions save energy and reduce CO2 emissions, eliminate noise and vibrations, and dramatically extend the lifecycles of machines and medical devices as well as skyscraper facades.

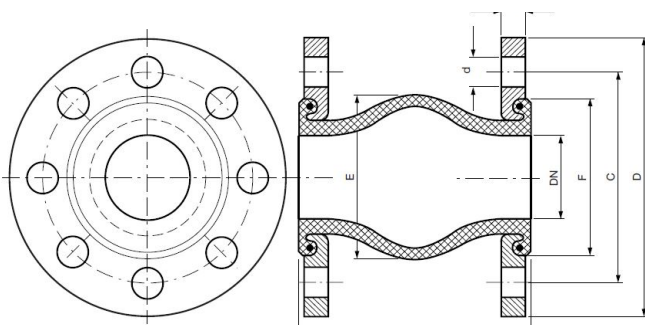
The Trelleborg Group has set ambitious science-based climate targets for its own operations, aiming for net zero emissions by 2035. Resource efficiency and circularity are becoming part of Trelleborg's DNA.

**PROTECTING THE ESSENTIAL**





## Dimensions & movements



### P TYPE (Building length 130 mm)

DN	BL	Eff. cross-sectional area Q	(E)	(F)	Permissible movements				Max. vacuum		Weight		Spring rates		
					Compression	Elongation	Lateral	Angular	Without support ring	With support ring	With flanges	With tie-rod flanges	Compression stiffness	Elongation stiffness	Lateral stiffness
mm	mm	cm <sup>2</sup>	mm	mm	mm	mm	mm	°	bar	bar	kg	kg	kg/cm	kg/cm	kg/cm
25/32	130	35	77	72	30	20	20	35°	0.8	1.0	2.8	4.5	50	75	50
40	130	50	85	80	30	20	20	35°	0.8	1.0	3.3	4.8	50	75	50
50	130	74	95	90	30	20	20	35°	0.7	1.0	3.7	5.0	50	75	50
65	130	87	110	105	30	20	20	30°	0.6	1.0	4.8	6.4	50	75	50
80	130	120	125	120	30	20	20	30°	0.5	1.0	5.3	7.5	50	75	50
100	130	143	145	140	30	20	20	25°	0.5	1.0	6.2	9.0	65	85	65
125	130	210	170	165	30	20	20	25°	0.4	1.0	8.2	11.2	65	85	65
150	130	283	195	190	30	20	20	15°	0.3	1.0	11.2	13.4	75	100	75
200	130	525	245	240	30	20	20	15°	0.3	1.0	16.8	19.4	75	100	75
250	130	636	295	290	30	20	20	10°	0.2	1.0	21.6	25.4	100	150	100
300	130	897	345	340	30	20	20	10°	0.2	1.0	30.1	33.1	100	150	100

Note: Maximum values do not apply simultaneously. Stiffness values tolerance: +/- 20%.

### W TYPE (Building length 150 mm or 200 mm)

DN	BL	Eff. cross-sectional area Q	(E)	(F)	Permissible movements				Max. vacuum		Weight		Spring rates		
					Compression	Elongation	Lateral	Angular	Without support ring	With support ring	With flanges	With tie-rod flanges	Compression stiffness	Elongation stiffness	Lateral stiffness
mm	mm	cm <sup>2</sup>	mm	mm	mm	mm	mm	°	bar	bar	kg	kg	kg/cm	kg/cm	kg/cm
25/32	150	24	77	72	30	20	20	35°	0.8	1.0	3	4	50	75	50
40	150	45	85	80	30	20	20	35°	0.8	1.0	3	5	50	75	50
50	150	46	95	90	30	20	20	35°	0.8	1.0	4	6	50	75	50
65	150	82	110	105	30	20	20	30°	0.8	1.0	5	7	50	75	50
80	150	110	125	120	30	20	20	30°	0.5	1.0	6	8	50	75	60
100	150	163	145	140	30	20	20	25°	0.5	1.0	7	10	65	85	65
125	150	228	170	165	30	20	20	15°	0.5	1.0	8	12	65	85	65
150	150	321	195	190	30	20	20	15°	0.5	1.0	10	16	75	100	75
200	200	549	240	240	30	20	20	15°	0.3	1.0	15	24	100	150	100
250	200	766	295	290	30	20	20	10°	0.3	1.0	20	34	100	150	100
300	200	975	345	340	30	20	20	10°	0.3	1.0	24	45	100	150	100
350	200	1290	430	425	30	20	20	10°	0.3	1.0	32	54	100	150	100
400	200	1628	475	470	30	20	20	10°	0.3	1.0	45	71	100	150	100
450	200	2054	532	510	30	20	20	10°	0.3	1.0	52	81	150	200	150
500	200	2546	590	560	30	20	20	10°	0.3	1.0	63	100	150	200	150
600	200	3466	685	655	30	20	20	6°	0.3	1.0	95	140	175	250	175

Note: Maximum values do not apply simultaneously. Stiffness values tolerance: +/- 20%.

# Teguflex® Expansion Joints

## What is your application?

Find your solution among our selection of rubber expansion joints, Teguflex, which covers the widest range of industrial applications, as well as heating and sanitary applications.

## Materials and applications

Color stripe	Inner tube	Outer cover	Reinforcement	Applications	Working temperature	Nominal pressure	Certifications
<b>RE</b>		EPDM	EPDM	Nylon cord	<b>WATER</b> Hot water, cooling water with salt solutions, chlorine solutions, esters and ketones.	- 35/+ 90 °C	See general chart <b>ABS<sup>(*)</sup></b> <b>DNV</b>
<b>HP</b>		EPDM HP	EPDM	Aramid	<b>STEAM 130 °C</b> Hot water, steam, hot air up to 130 °C.	- 35/+ 130 °C	See HP chart <b>ABS<sup>(*)</sup></b> <b>DNV</b>
<b>DW</b>		EPDM ACS	EPDM	Nylon cord	<b>ACS</b> Drinkable water	- 25/+ 90 °C	See general chart <b>ACS</b>
<b>WH</b>		WHITE NITRILE	ECO	Nylon cord	<b>FOOD</b> Food and beverages. Including fats and oils.	- 25/+ 90 °C	See general chart <b>FDA</b>
<b>YE</b>		ECO	ECO	Nylon cord	<b>OIL</b> Water, saline solutions, alkalis, mineral oils, vegetable or animal oils, oils aerosols, propane and butane gas, etc.	- 25/+ 90 °C	See general chart <b>ABS<sup>(*)</sup></b> <b>DNV</b>
<b>HO</b>		HNBR	HNBR	Aramid	<b>OIL 120 °C</b> Oil, mix of water and oils, mix of compressed air and oils, etc.	- 25/+ 120 °C	See H0 chart <b>ABS<sup>(*)</sup></b> <b>DNV</b>
<b>BL</b>		SBR	CR	Nylon cord	<b>ABRASION</b> Abrasive materials, suspended stones, mud, calcium, etc.	- 35/+ 90 °C	See BL chart
<b>GR</b>		CSM	CR	Nylon cord	<b>CHEMICALS</b> Strong and concentrated acids, etc. Compressed air that bears oil aerosols.	- 25/+ 90 °C	See general chart <b>ABS<sup>(*)</sup></b>
<b>FP</b>		Viton™	Viton™	Aramid	<b>CHEMICAL HIGH TEMPERATURE</b> Chemical products highly aggressive with high temperature up to 150 °C.	- 15/+ 150 °C	See FP chart

Viton™ is a trademark of The Chemours Company FC, LLC

(\*) ABS applies to P type

## Pressure rating

General Chart	Temperature	DN25-DN150	DN200-DN300	DN350-DN600
Max. working pressure	70 °C 90 °C	16 bar 10 bar	16 bar 10 bar	10 bar 8 bar
Test pressure	20 °C	25 bar	25 bar	15 bar
Burst pressure	20 °C	>50 bar	>50 bar	>30 bar

General chart applies to RE, DW, WH, YE and GR types

HP Chart	Temperature	DN25-DN150	DN200-DN300	DN350-DN600
Max. working pressure	100 °C 130 °C	16 bar 10 bar	10 bar 6 bar	10 bar 6 bar
Test pressure	20 °C	25 bar	15 bar	15 bar
Burst pressure	20 °C	>60 bar	>60 bar	>30 bar

H0 Chart	Temperature	DN25-DN150	DN200-DN300	DN350-DN600
Max. working pressure	90 °C 110 °C	16 bar 10 bar	10 bar 6 bar	10 bar 6 bar
Test pressure	20 °C	25 bar	15 bar	15 bar
Burst pressure	20 °C	>50 bar	>50 bar	>30 bar

BL Chart	Temperature	DN25-DN150	DN200-DN300	DN350-DN600
Max. working pressure	70 °C 90 °C	16 bar 10 bar	16 bar 10 bar	10 bar 8 bar
Test pressure	20 °C	25 bar	25 bar	15 bar
Burst pressure	20 °C	>60 bar	>60 bar	>30 bar

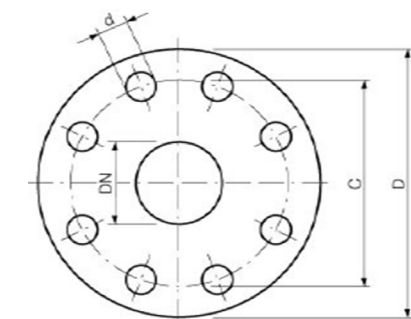
FP Chart	Temperature	DN25-DN150	DN200-DN300	DN350-DN600
Max. working pressure	90 °C 150 °C	10 bar 8 bar	8 bar 6 bar	
Test pressure	20 °C	16 bar	12 bar	
Burst pressure	20 °C	>40 bar	>30 bar	

## Flanges

Our standard is turnable flanges in zinc-plated carbon steel S235JR.

The chart below shows the dimensions of the flanges according to EN 1092 P10/16 and ASME B16.5 150lbs.

The flanges can be supplied under other standards, pressure classes or materials.

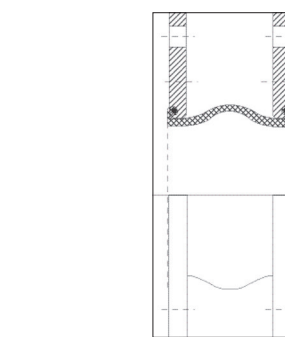


ND	PN 10 (EN 1092)				PN 16 (EN 1092)				PN 20 (ASME B16.5 150 lbs.)			
	OD D mm	Pitch Circle Diameter C mm	Number of holes	Diameter of holes d mm	OD D mm	Pitch Circle Diameter C mm	Number of holes	Diameter of holes d mm	OD D mm	Pitch Circle Diameter C mm	Number of holes	Diameter of holes d mm
25	115	85	4	14	115	85	4	14	108	79.4	4	15.9
32	140	100	4	18	140	100	4	18	117	88.9	4	15.9
40	150	110	4	18	150	110	4	18	127	98.4	4	15.9
50	165	125	4	18	165	125	4	18	152	120.6	4	19.0
65	185	145	8	18	185	145	8	18	178	139.7	4	19.0
80	200	160	8	18	200	160	8	18	190	152.4	4	19.0
100	220	180	8	18	220	180	8	18	229	190.5	8	19.0
125	250	210	8	18	250	210	8	18	254	215.9	8	22.2
150	285	240	8	22	285	240	8	22	279	241.3	8	22.2
200	340	295	8	22	340	295	12	22	343	298.4	8	22.2
250	395	350	12	22	405	355	12	26	406	361.9	12	25.4
300	445	400	12	22	460	410	12	26	483	431.8	12	25.4
350	505	460	16	22	520	470	16	26	533	476.2	12	28.6
400	565	515	16	26	580	525	16	30	597	539.7	16	28.6
450	615	565	20	26	640	585	20	30	635	577.8	16	31.7
500	670	620	20	26	715	650	20	33	698	635.0	20	31.7
600	780	725	20	30	840	770	20	36	813	749.3	20	34.9

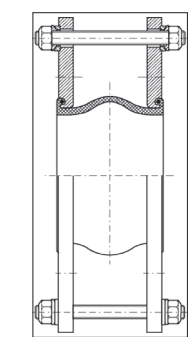
## Tie rods

We name U type those expansion joints with turnable flanges without tie rods. They allow axial, lateral, and angular movements.

If axial movements must be restricted, tie rods can be added. They are identified as L type in our offer.



**U Type**  
Standard unit for axial, lateral and angular movements.



**L Type**  
Unit with tie rods to limit axial movements.