

DIFLON

T E C H N O L O G Y



BELLOWS[®]

General Catalogue



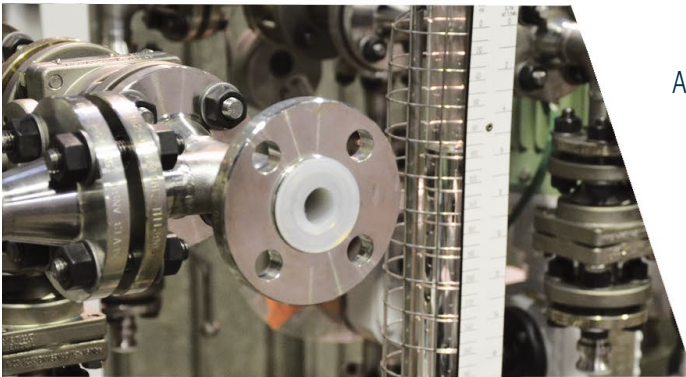
SINCE 1969

WHY DIFLON ?

The application of products manufactured by Diflon Technology Srl is a strategic choice, responsible and safe, thanks to the technical materials of high quality certified.

The finished products are designed with their own technical offices with cutting-edge tools and manufactured in stablimenti of Diflon production in Italy.

All materials are manufactured in accordance with ISO 9001 certification following the instructions of the Decree 81/08 and in accordance with 97/23/EC (PED).



ADDITIONAL SERVICES

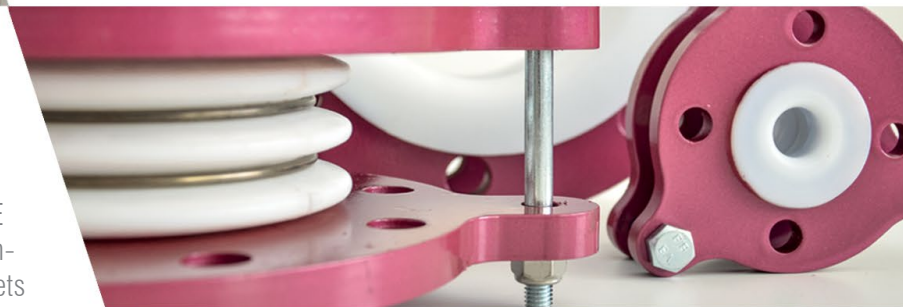
- Design and production of special coatings anticorrosion in fluoropolimery
- Supply of valve packages
- Technical consultancy in the choice of materials
- Technical testing and certification standards and on request
- Detailed engineering of sketches, material lists, assembly supervision

SINCE 1969

Since more than 40 years, Diflon Technology srl. Direct production, in their establishment located in Carobbio degli Angeli (BG) Italy:

- Pipes, fittings, columns and tanks internally lined in PTFE / PFA according to DIN and ANSI standards for corrosion-resistant applications.
- Technical hoses, fittings and gaskets used for high-performance applications in the chemical, petrochemical, pharmaceutical, food, industry.
- Universal gaskets Diflex. • PTFE / TFM expansion joints. • Lining in PFA for valves, poms etc.

All products are made using the most modern production techniques.



STRUCTURE OF PRODUCTION DEPARTMENTS

- Stores finished parts, raw materials
- Automatic CNC Machines
- Cutting and welding departments
- Coating PTFE/PFA pipes, columns and tanks
- Sandblasting
- Painting
- PFA transfer molding
- PTFE molding
- expansion joints Stamping in TFM / PTFE
- pipes and fittings Flexible Manufacturing
- Industrial gaskets
- Flexible hoses and fittings

B

A 3D CAD rendering of a PTFE expansion joint assembly. The assembly consists of two orange-colored flanges connected by a central grey metal rod. The flanges have several circular holes. A stack of four white PTFE bellows is positioned between the flanges, secured by metal rings. Two hexagonal nuts are visible on the top flange, one on each side of the rod.

BELLOWS

PTFE
EXPANSION
JOINTS

DIFLON

T E C H N O L O G Y

B

BELLOWS

PTFE

PTFE BELLOWS

PTFE EXPANSION JOINTS

Expansion joints are produced according to the most innovative blablabla techniques from semi-finished and raw materials of exceptional quality.

To be used in the presence of axial and vertical expansion in important temperature conditions (-30°C + 220°C), in presence of aggressive acids or vapors and for food products.

The ANSI or DIN flanges allow the connection between international standards, the steel reinforcement rings are at the PTFE expansion joint to reach important pressures, considering the plastic material of the manufactured article. (See tab.1-2-3)

INDEX



- Expansion joint, 2 convolutes

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- Expansion joint, 3 convolutes



- Expansion joint, 3 convolutes



2 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN

Standard version

Design:

ASME/ANSI B16.5 Class 150

DIN EN 1092-1, PN 10

Flanges: 2 loose flanges

Range:

DN 25 - DN 500 - DN 1" - DN 20"

Materials:

1.1 PTFE according to ASTM D-4895

2.1 Standard: AISI 316-1.4404

2.2 Option Hastelloy C4

3.1 Zinc plated

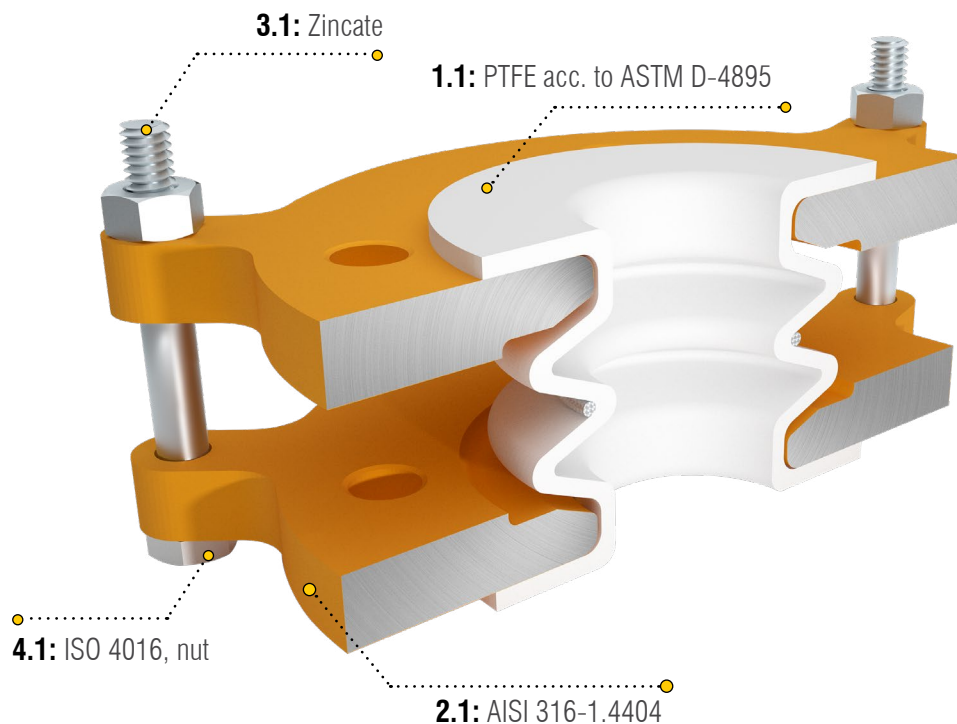
3.2 X6CrNiTi 1810 = 1.454-AISI 321

4.1 Standard: ISO 4016, bolt and nut

4.2 Option: stainless steel/A2

Lining:

PTFE

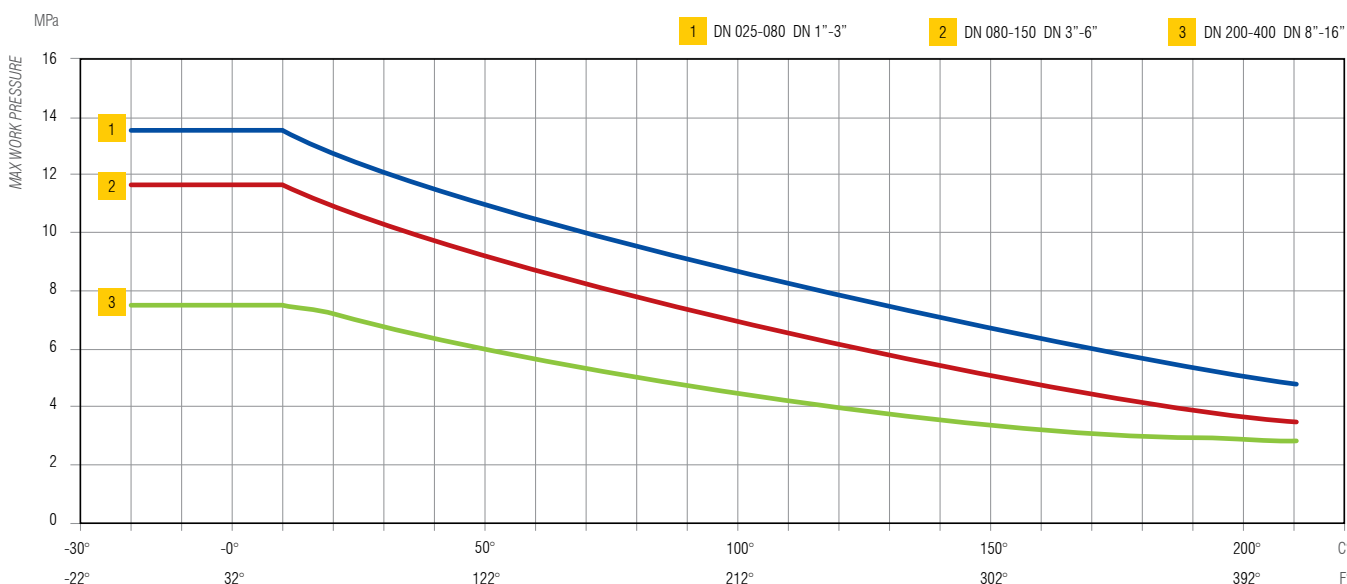


Operating conditions:

Suitable for antacid and heavy uses.

Temperature -30°C/-30°F + 230°C/440°F

Pressure / temperature - diagram for 2 convolutes



TAB.1



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previous view

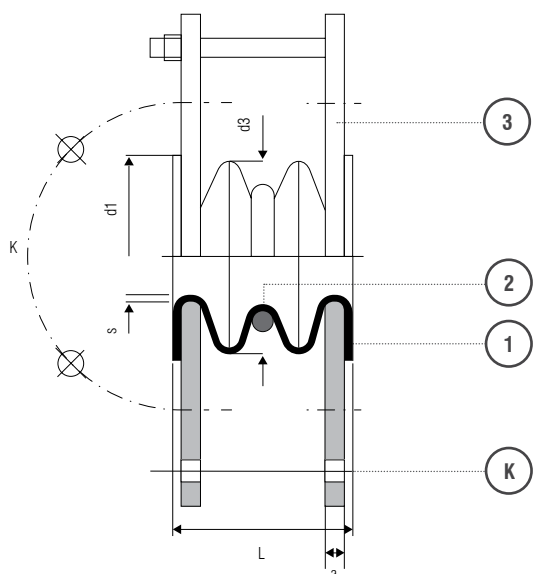
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data sheet

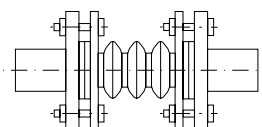
BELLOWS

B

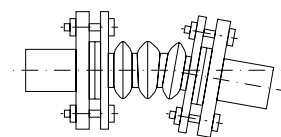
2 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN



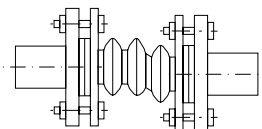
Movements



Axial



Angular



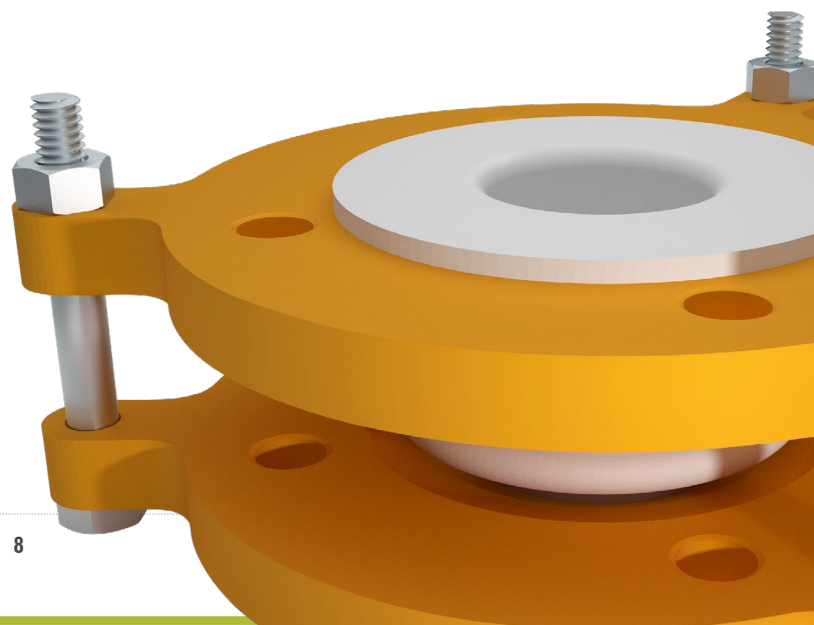
Lateral

Dimension table n 1.1

DN	L	Axial stroke	Lateral stroke	Angular deviation	d1	K	a	Internal diameter	Rigidity axial	Holes	Weight	
15	54	6	3	7	45	65	11	24	27	4 X M 12	1,7	DIN
1/2"	54	6	3	7	35	60,3	11	24	27	4 X 1/2"	1,7	ANSI
20	54	6	3	7	58	75	11	24	27	4 X M 12	1,7	DIN
3/4"	54	6	3	7	43	69,8	11	24	27	4 X 1/2"	1,7	ANSI
25	54	6	3	7	68	85	11	24	27	4 X M 12	1,7	DIN
1"	54	6	3	7	51	79,4	11	24	27	4 X 1/2"	1,7	ANSI
32	56	10	3	7	78	100	13	33	57	4 X M 16	2,1	DIN
1 1/4"	56	10	3	7	64	88,5	13	33	57	4 X 1/2"	2,1	ANSI
40	56	12	3	7	88	110	13	40	66	4 X M 16	2,6	DIN
1 1/2"	56	12	3	7	73	98,4	13	40	66	4 X 5/8	2,6	ANSI

2 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN

DN	L	Axial stroke	Lateral stroke	Angular deviation	d1	K	a	Internal diameter	Rigidity axial	Holes	Weight	
50	68	15	3	7	102	125	15	55	86	4 X M 16	3,8	DIN
2"	68	15	3	7	92	120,6	15	55	86	4 X 19	3,8	ANSI
65	78	15	5	7	122	145	15	85	122	4 X 18	4,6	DIN
2 1/2"	78	15	5	7	105	139,7	15	85	122	8 X 18	4,6	ANSI
80	88	15	5	7	138	160	15,5	113	147	4 X 18	5,2	DIN
3"	88	15	5	7	127	152,4	15,5	113	147	8 X 18	5,2	ANSI
100	88	15	6	7	158	180	19	158	161	8 X 18	6,9	DIN
4"	88	15	6	7	158	190,5	19	158	161	8 X 18	6,9	ANSI
125	95	15	6	7	188	210	19,25	222	177	8 X 22	11,3	DIN
5"	95	15	6	7	186	215,9	19,25	222	177	8 X 23	11,3	ANSI
150	105	15	6	7	212	240	23	299	168	8 X 22	12,6	DIN
6"	105	15	6	7	216	241,3	23	299	168	8 X 23	12,6	ANSI
200	110	15	6	7	268	295	25	483	185	8 X 22	20,8	DIN
8"	110	15	6	7	270	298,4	25	483	185	12 X 23	20,8	ANSI
250	128	20	6	7	320	350	28	731	174	12 X 23	26,7	DIN
10"	128	20	6	7	324	361,9	28	731	174	12 X 25	26,7	ANSI
300	140	20	10	7	378	400	31	973	161	12 X 23	34,7	DIN
12"	140	20	10	7	381	431,8	31	973	161	12 X 25	34,7	ANSI





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data sheet

BELLOWS

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COMPENSATORI DI DILATAZIONE IN PTFE A 3 ONDE, CON ANELLI DI RINFORZO FLANGIATO ANSI E DIN

Standard version

Design:

ASME/ANSI B16.5 Classe 150
DIN EN 1092-1, PN 10
Flanges: 2 loose flanges

Range:

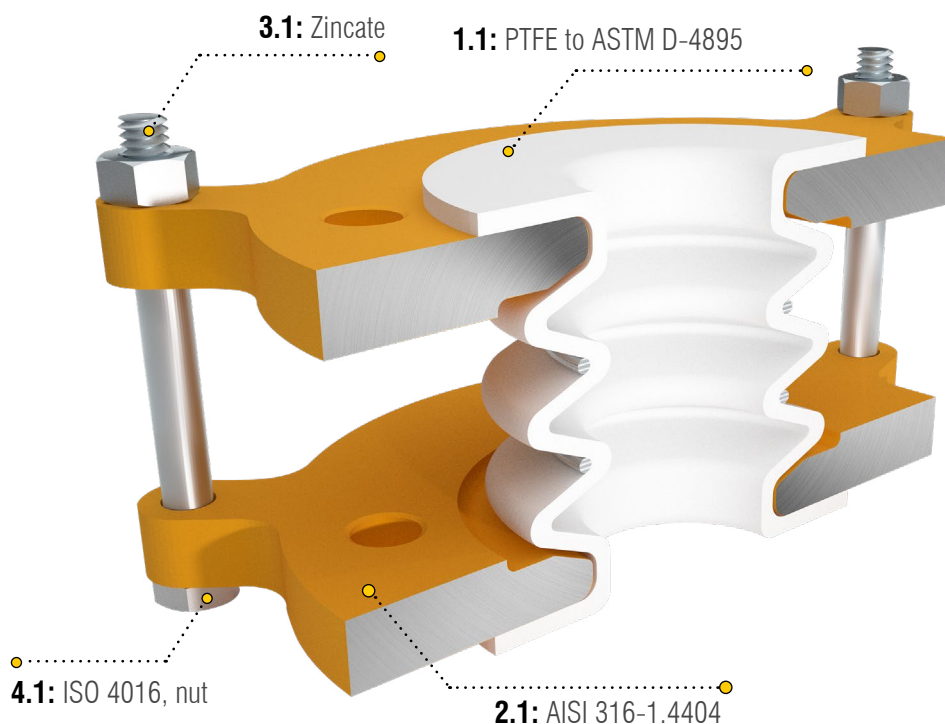
DN 25 - DN 500 - DN 1" - DN 20"

Materials:

- 1.1 PTFE according to ASTM D-4895
- 2.1 Standard: AISI 316-1.4404
- 2.2 Option Hastelloy C4
- 3.1 Zinc plated
- 3.2 X6CrNiTi 1810 = 1.454-AISI 321
- 4.1 Standard: ISO 4016, bolt and nut
- 4.2 Option: stainless steel A2

Rivestimento:

PTFE

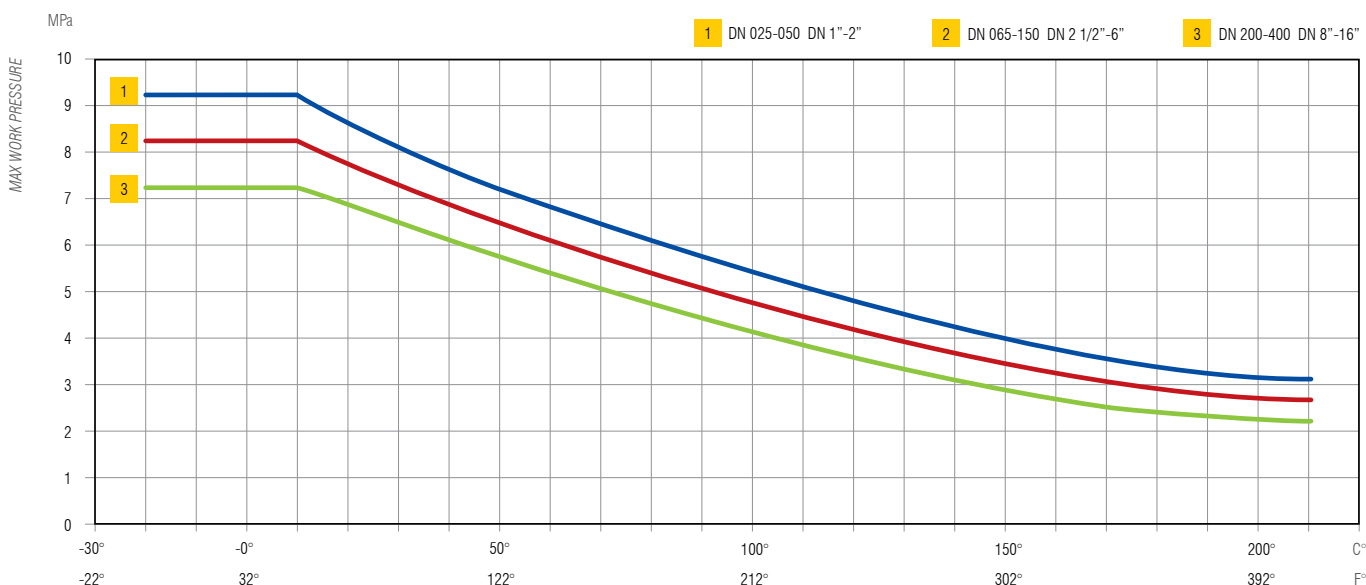


Operating conditions:

Suitable for antacid and heavy uses.

Temperature -30°C/-30°F + 230°C/440°F

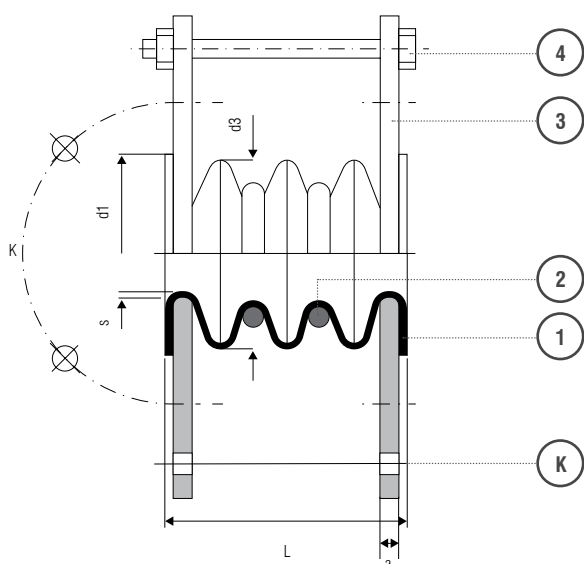
Pressure / temperature - diagram for 3 convolutes



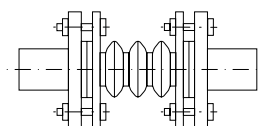
TAB.2



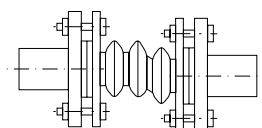
3 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN



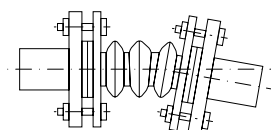
Movements



Axial



Lateral



Angular

Dimension table n 2.1

DN	L	Axial stroke	Lateral stroke	Angular deviation	d	K	a	Internal diameter	Rigidity axial	Holes	Weight	
15	70	10	6	14	45	65	11	24	18	4 X M 12	1,9	DIN
1/2"	70	10	6	14	35	60,3	11	24	18	4 X 1/2"	1,9	ANSI
20	70	10	6	14	58	75	11	24	18	4 X M 12	1,9	DIN
3/4"	70	10	6	14	43	69,8	11	24	18	4 X 1/2"	1,9	ANSI
25	70	10	6	14	68	85	11	24	18	4 X M 12	1,9	DIN
1"	70	10	6	14	51	79,4	11	24	18	4 X 1/2"	1,9	ANSI
32	75	10	6	14	78	100	13	33	38	4 X M 16	2,3	DIN
1 1/4"	75	10	6	14	64	88,5	13	33	38	4 X 1/2"	2,3	ANSI
40	80	15	6	14	88	110	13	40	44	4 X M 16	2,9	DIN
1 1/2"	80	15	6	14	73	98,4	13	40	44	4 X 5/8	2,9	ANSI



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previous view

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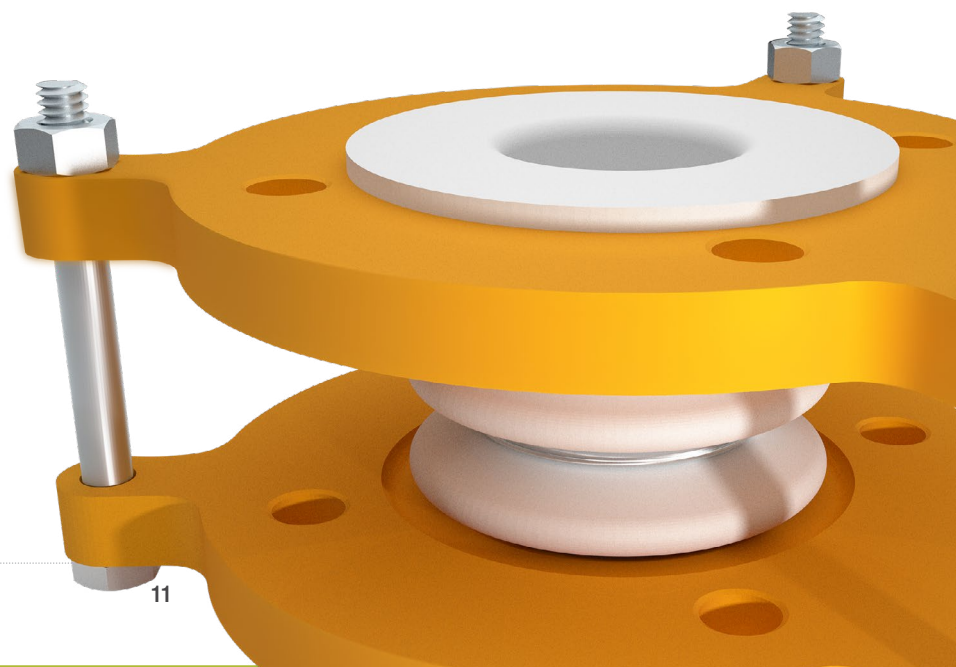
data sheet

BELLOWS

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3 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN

DN	L	Axial stroke	Lateral stroke	Angular deviation	d	K	a	Internal diameter	Rigidity axial	Holes	Weight	
50	85	15	9	14	102	125	15	55	57	4 X M 16	4,2	DIN
2"	85	15	9	14	92	120,6	15	55	57	4 X 19	4,2	ANSI
65	100	20	9	14	122	145	15	85	81	4 X 18	5,1	DIN
2 1/2"	100	20	9	14	105	139,7	15	85	81	8 X 18	5,1	ANSI
80	110	20	13	14	138	160	15,5	113	98	4 X 18	5,8	DIN
3"	110	20	13	14	127	152,4	15,5	113	98	8 X 18	5,8	ANSI
100	110	25	13	14	158	180	19	158	107	8 X 18	7,7	DIN
4"	110	25	13	14	158	190,5	19	158	107	8 X 18	7,7	ANSI
125	120	25	14	14	188	210	19,25	222	118	8 X 22	12,5	DIN
5"	120	25	14	14	186	215,9	19,25	222	118	8 X 23	12,5	ANSI
150	130	25	14	14	212	240	23	299	112	8 X 22	14	DIN
6"	130	25	14	14	216	241,3	23	299	112	8 X 23	14	ANSI
200	140	30	14	14	268	295	25	483	123	8 X 22	23,1	DIN
8"	140	30	14	14	270	298,4	25	483	123	12 X 23	23,1	ANSI
250	165	30	14	14	320	350	28	731	116	12 X 23	29,7	DIN
10"	165	30	14	14	324	361,9	28	731	116	12 X 25	29,7	ANSI



3 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN

Standard version

Design:

ASME/ANSI B16.5 Class 150

DIN EN 1092-1, PN 10

Flanges: 2 loose flanges

Range:

DN 25 - DN 500 - DN 1" - DN 20"

Materiali:

1.1 PTFE according to ASTM D-4895

2.1 Standard: AISI 316-1.4404

2.2 Option Hastelloy C4

3.1 Zinc plated

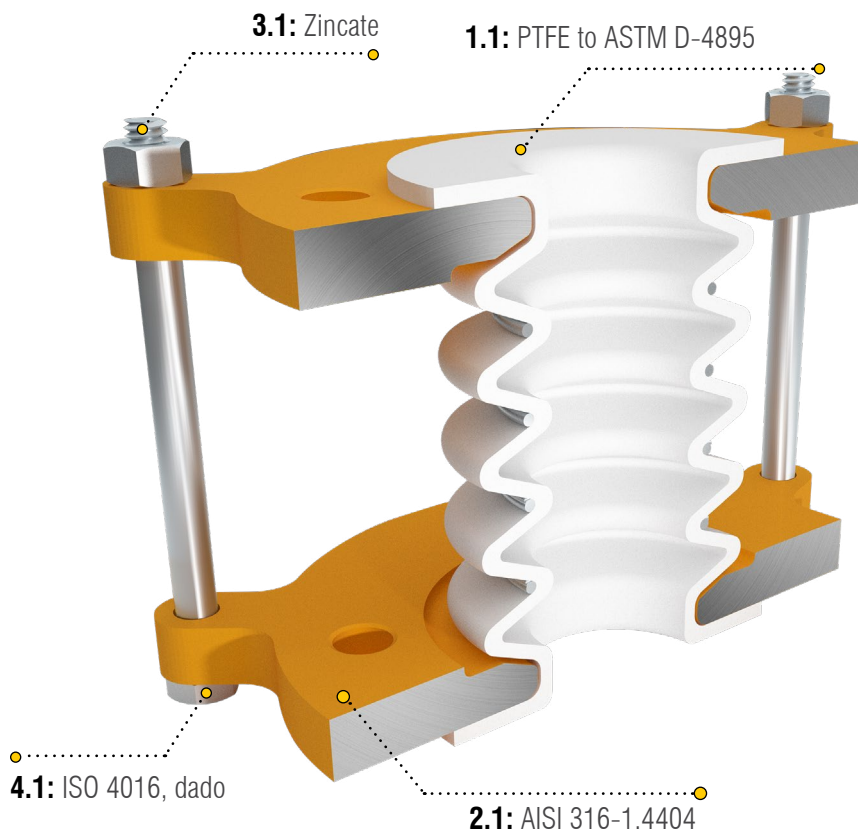
3.2 X6CrNiTi 1810 = 1.454-AISI 321

4.1 Standard: ISO 4016, bolt and nut

4.2 Option: stainless steel/A2

Rivestimento:

PTFE

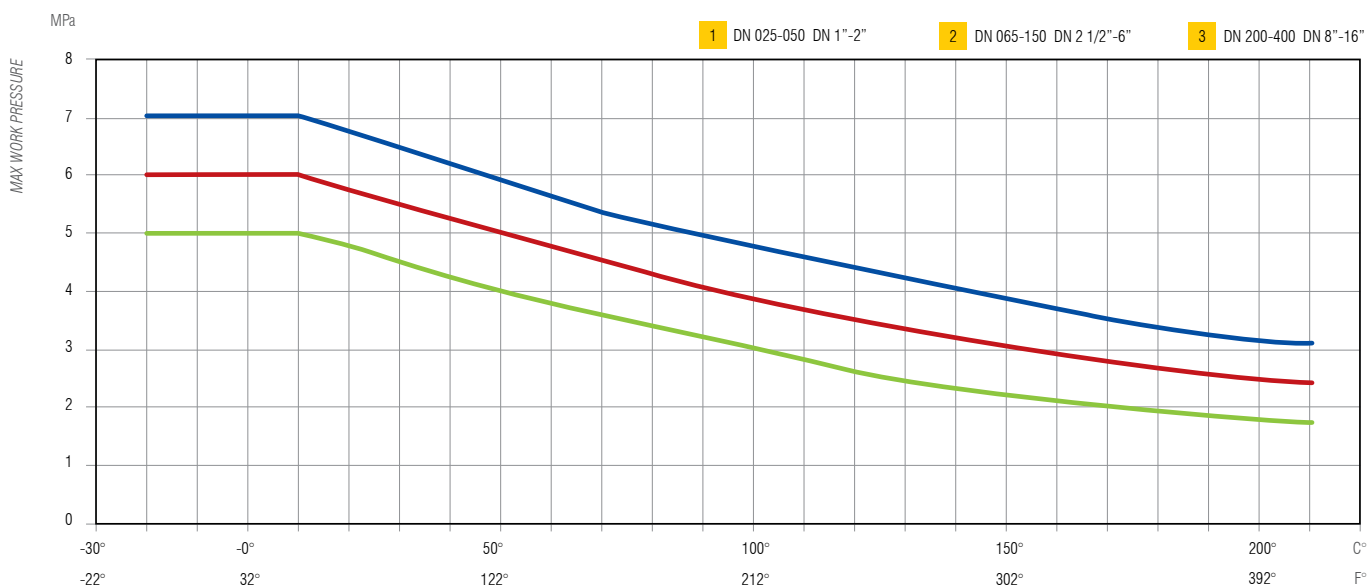


Operating conditions:

Suitable for antacid and heavy uses.

Temperature -30°C/-30°F + 230°C/440°F

Pressure / temperature - diagram for 5 convolutes



TAB.3



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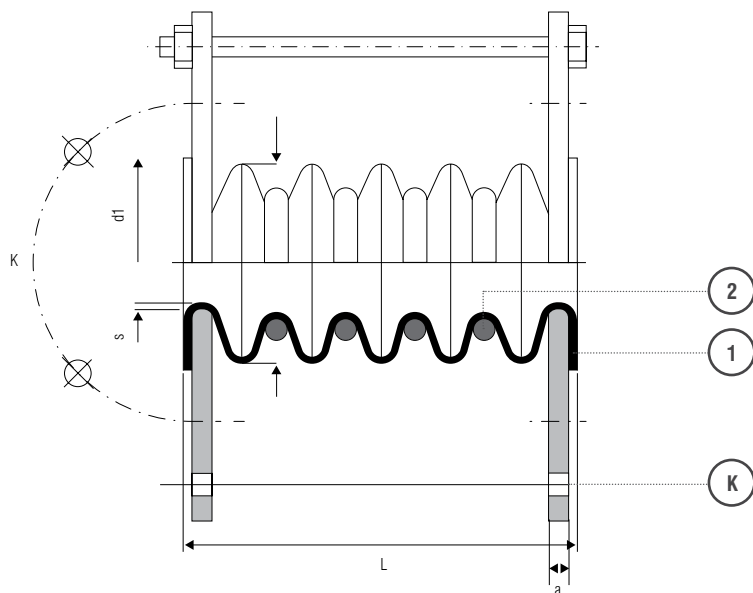
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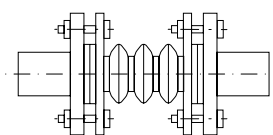
BELLOWS

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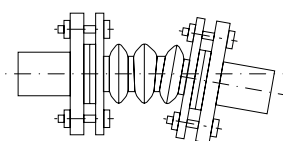
3 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN



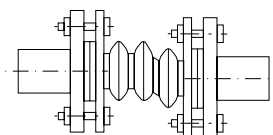
Movements



Axial



Angular



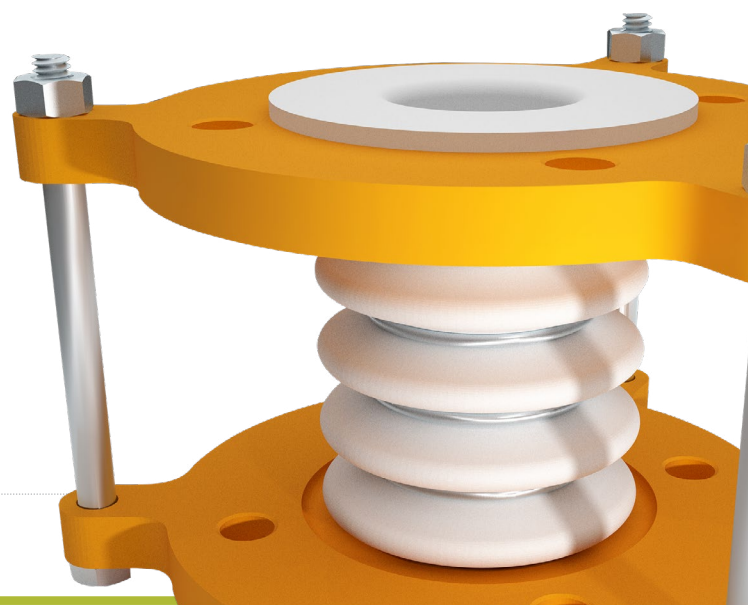
Lateral

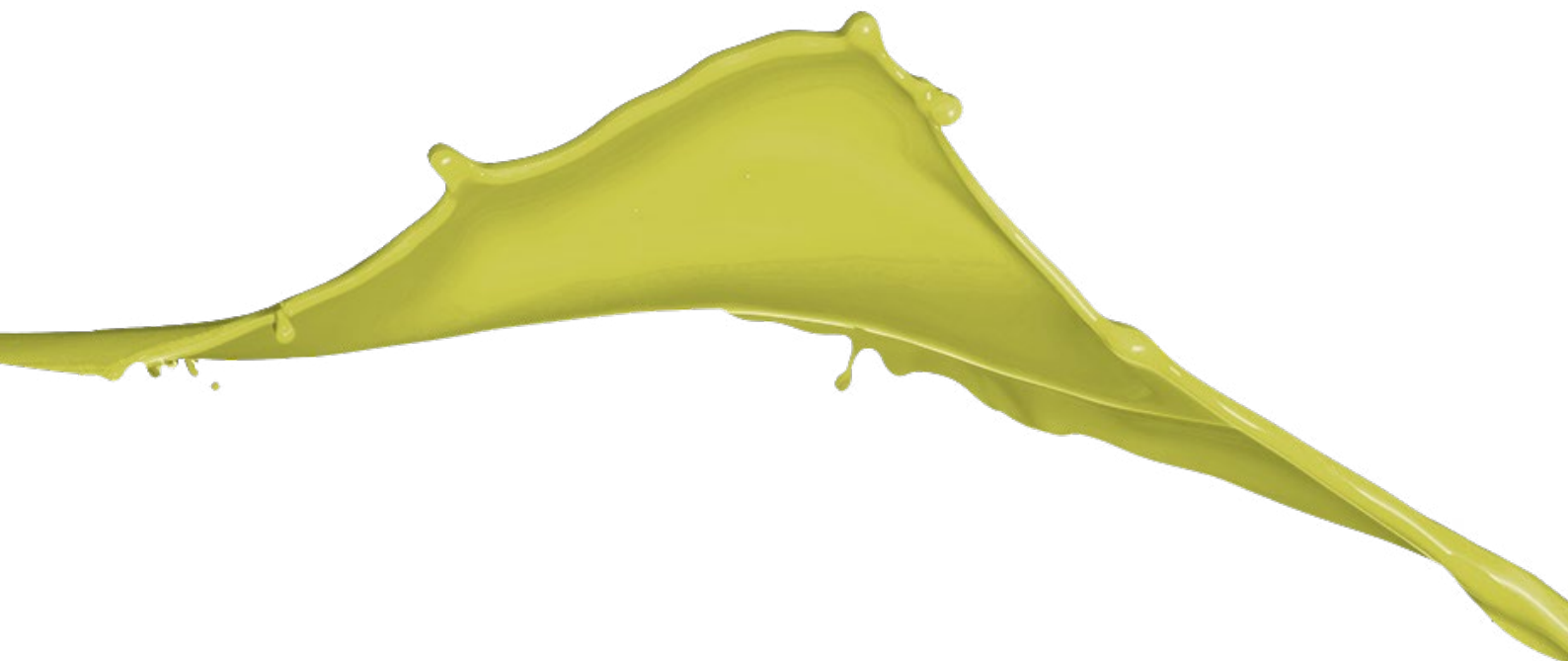
Dimension table n 3.1

DN	L	Axial stroke	Lateral stroke	Angular deviation	d	K	a	Internal diameter	Rigidity axial	Holes	Weight	
15	68	8	6	14	45	65	11	24	18	4 X M 12	1,9	DIN
1/2"	68	8	6	14	35	60,3	11	24	18	4 X 1/2"	1,9	ANSI
20	68	8	6	14	58	75	11	24	18	4 X M 12	1,9	DIN
3/4"	68	8	6	14	43	69,8	11	24	18	4 X 1/2"	1,9	ANSI
25	100	15	6	14	68	85	11	24	18	4 X M 12	1,9	DIN
1"	100	15	6	14	51	79,4	11	24	18	4 X 1/2"	1,9	ANSI
32	105	15	6	14	78	100	13	33	38	4 X M 16	2,3	DIN
1 1/4"	105	15	6	14	64	88,5	13	33	38	4 X 1/2"	2,3	ANSI
40	115	20	6	14	88	110	13	40	44	4 X M 16	2,9	DIN
1 1/2"	115	20	6	14	73	98,4	13	40	44	4 X 5/8	2,9	ANSI

3 CONVOLUTES PTFE EXPANSION JOINTS WITH FLANGED REINFORCEMENT RINGS, ANSI AND DIN

DN	L	Axial stroke	Lateral stroke	Angular deviation	d	K	a	Internal diameter	Rigidity axial	Holes	Weight	
50	125	25	9	14	102	125	15	55	57	4 X M 16	4,2	DIN
2"	125	25	9	14	92	120,6	15	55	57	4 X 19	4,2	ANSI
65	145	30	9	14	122	145	15	85	81	4 X 18	5,1	DIN
2 1/2"	145	30	9	14	105	139,7	15	85	81	8 X 18	5,1	ANSI
80	160	35	13	14	138	160	15,5	113	98	4 X 18	5,8	DIN
3"	160	35	13	14	127	152,4	15,5	113	98	8 X 18	5,8	ANSI
100	165	40	13	14	158	180	19	158	107	8 X 18	7,7	DIN
4"	165	40	13	14	158	190,5	19	158	107	8 X 18	7,7	ANSI
125	170	40	14	14	188	210	19,25	222	118	8 X 22	12,5	DIN
5"	170	40	14	14	186	215,9	19,25	222	118	8 X 23	12,5	ANSI
150	180	40	14	14	212	240	23	299	112	8 X 22	14	DIN
6"	180	40	14	14	216	241,3	23	299	112	8 X 23	14	ANSI
200	210	40	14	14	268	295	25	483	123	8 X 22	23,1	DIN
8"	210	40	14	14	270	298,4	25	483	123	12 X 23	23,1	ANSI
250	240	50	14	14	320	350	28	731	116	12 X 23	29,7	DIN
10"	240	50	14	14	324	361,9	28	731	116	12 X 25	29,7	ANSI





Specialist in fluoropolymer lining

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TECHNOLOGY

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