



SPS Piping Components and -Systems

with corrosion- and abrasion-resistant linings such as PFA, PFA-AS (anti-static), PFA-HP (high-purity), PVDF, PTFE, PTFE-T (modified), PTFE-AS (anti-static), PP, or ETFE.

Sizes **DN15 – DN150 PN16, DN 200 – DN600 PN10**

Standard, upon request ½" – 24" ANSI 150lbs resp. JIS, BS etc.

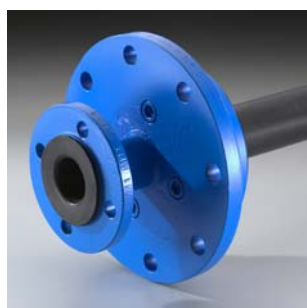
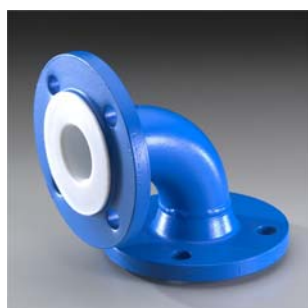
Service temperatures from –50°C up to +250°C (-77°F – 555°F), depending on material selection



Products

- Flanged Pipes
- Elbows 90°/60°/45°/30°
- Tees and Crosses, Instrument Tees
- Reducers, concentric or excentric
- Reducing Flanges, Spacers
- Liquid Level Gauges
- Strainers
- Heavy-duty Expansion Joints

Components



Heavy-duty Expansion Joints

Materials

Flanges made of Ductile Iron, epoxy or Stainless Steel

Bellows

2 up to 5 convolutions, made of PTFE or PTFE-AS

Piping Components, PFA- or PFA-AS-lined

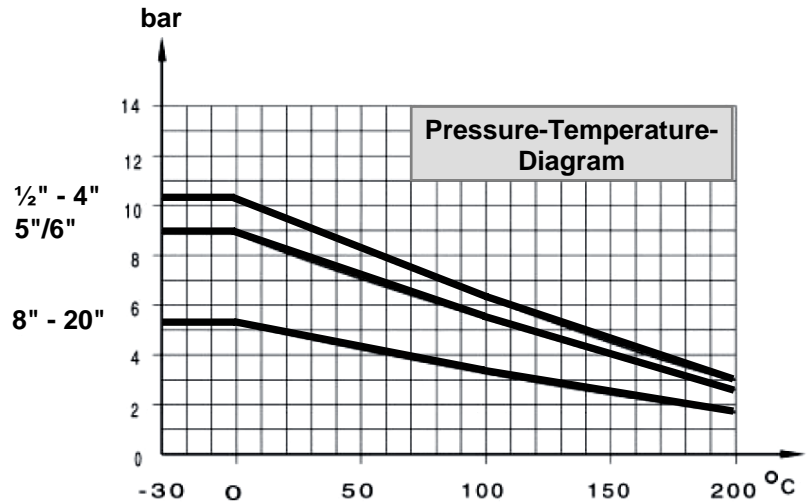
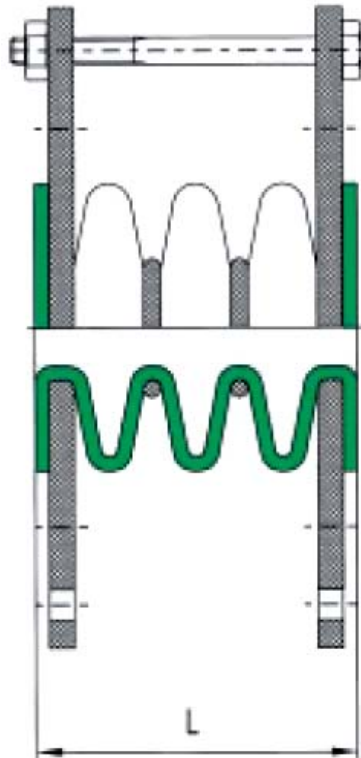
Materials

C.Steel, Ductile Iron or Cast Steel, zinc-primed or epoxy-coated acc. to RAL-Specification of customer

Certificates

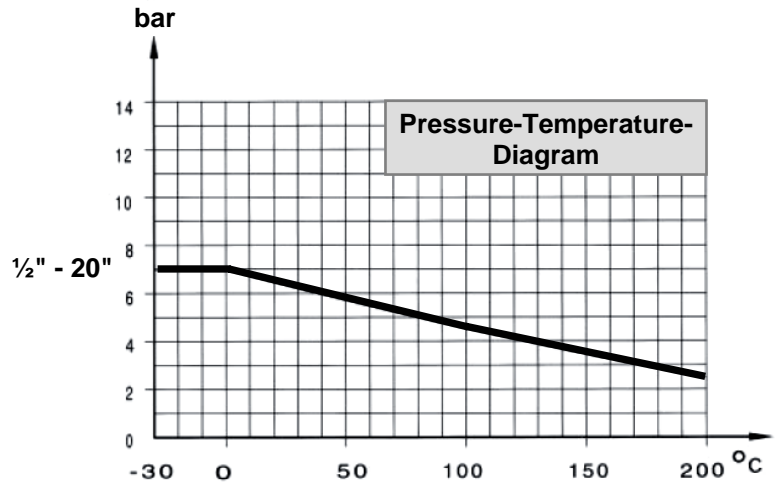
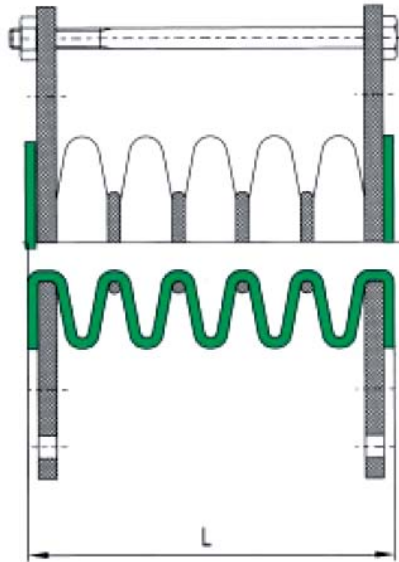
Material resp. test certificates acc. to EN 10204-3.1 upon request

Expansion Joints 3 Convolutions ANSI 150lbs



NPS	L mm	Extension Compr. ± mm	Misalign- ment max. mm	Angular- Deflection max. °	Vacuum-Resistance			
					10 ⁴ Pa	max. °C	10 ⁴ Pa	max. °C
1/2"	37	6	4	14	0,1	200		
3/4"	37	6	4	14	0,1	200		
1"	46	13	6	14	0,1	200		
1 1/4"	46	13	6	14	0,1	200		
1 1/2"	46	13	6	14	0,1	200		
2"	56	15	9	14	0,1	200		
2 1/2"	77	19	9	14	0,1	200		
3"	77	25	13	14	0,1	200		
4"	91	25	13	14	0,1	200		
5"	111	25	14	14	0,1	150		
6"	101	28	14	14	0,1	150		
8"	137	28	14	14	0,1	50	2,0	150
10"	200	30	14	14	0,7	45	3,4	100
12"	196	30	15	14	1,5	45	6,7	100
14"	215	32	18	14	1,5	45	6,7	100
16"	233	35	20	14	1,5	45	6,7	100
18"	280	30	20	14	3,4	45	7,0	100
20"	327	30	25	14			8,0	100

Expansion Joints 5 Convolutions ANSI 150lbs



NPS	L mm	Extension Compr. ± mm	Misalignment max. mm	Angular-Deflection max. °	Vacuum-Resistance
1/2"	55	8	5	20	<i>not recommended</i>
3/4"	55	8	5	20	
1"	68	8	12	20	
1 1/4"	68	8	12	20	
1 1/2"	80	13	12	20	
2"	88	19	12	20	
2 1/2"	113	25	13	20	
3"	113	25	16	20	
4"	139	25	16	20	
5"	167	32	16	20	
6"	153	32	16	20	
8"	207	32	16	20	
10"	300	32	16	20	
12"	288	35	18	20	
14"	325	35	18	20	
16"	343	40	25	20	
18"	470	40	25	20	
20"	520	40	25	20	



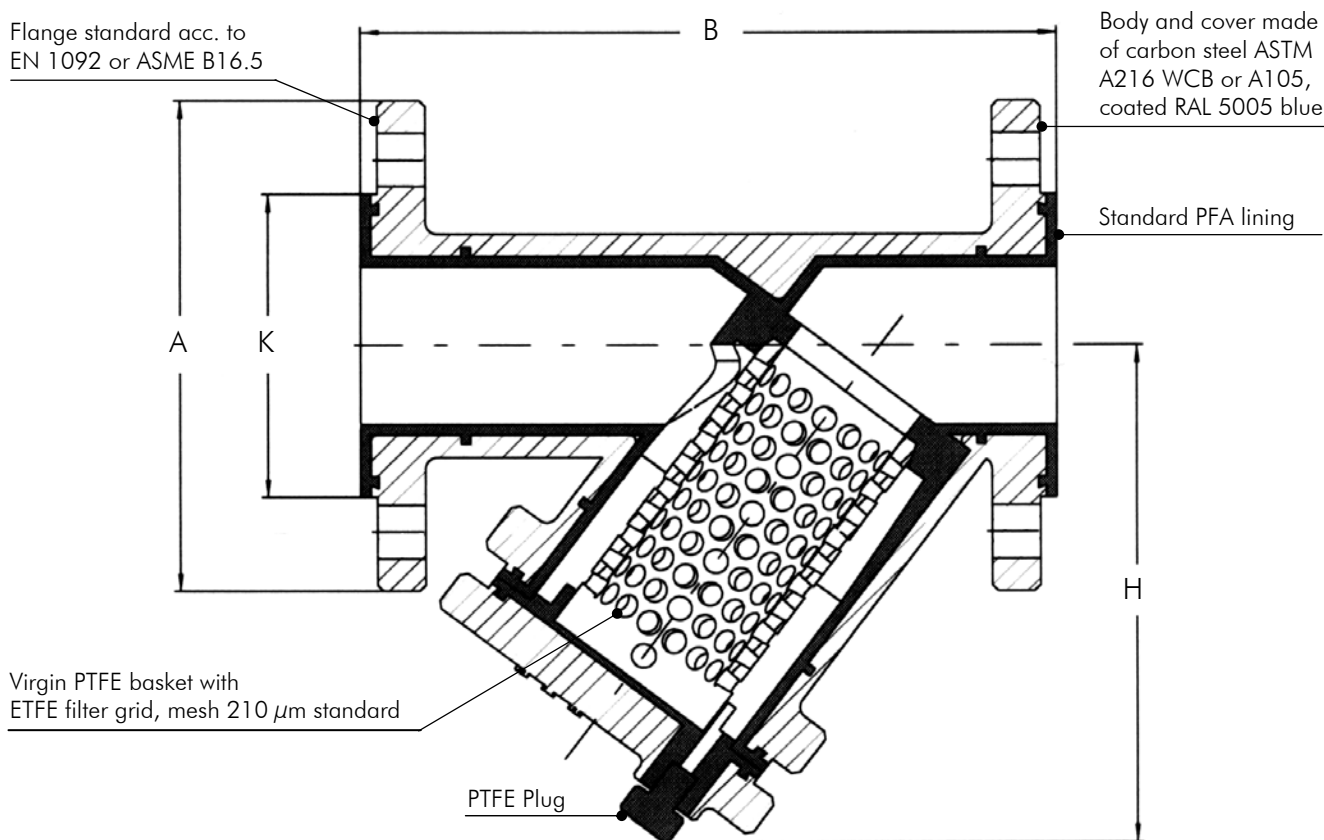
Operating Conditions

- Temperature range from -30°C up to $+200^{\circ}\text{C}$ (depending on lining material)
- Pressure range from 0.05 Torr up to 10 bar

Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, and spark testing at 35 kV to assure lining integrity. Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificate acc. to EN 10204-3.1

Construction of Strainer



Technical Data Dimensions in mm

DN	A	B	H	K	kg	Flange holes DIN	Flange holes ANSI
25/1"	115	160	125	85	6	4 x 14	4 x 16
40/1½"	150	200	145	110	13	4 x 19	4 x 16
50/2"	165	230	165	125	16	4 x 19	4 x 19
80/3"	200	310	280	160	24	8 x 19	4 x 19
100/4"	220	350	305	180	32	8 x 19	8 x 19
150/6"	285	480	370	216	58	8 x 23	8 x 22

Face to face B acc. to DIN EN 558-1 range 1



SLI Linings

for pumps, piping components, vessels, chemical equipment, valves – made of corrosion- and abrasion-resistant materials such as PFA, PFA-AS (anti-static), PFA-HP (high-purity), PVDF, PP or ETFE.

SMP Molded Parts

manufactured acc. to customer requirement – made of resistant materials such as PTFE, PTFE-T (modified), PTFE-AS (anti-static), PVDF, PP or UHMWPE.



SLI

- Front plates for displacement pumps
- Flow measuring tubes, dip pipes and suction hoses for vessels or reactors
- Reducing flanges
- Bodies for diaphragm valves, sight glasses, ball check valves, sampling valves
- Couplings

SMP

- Valve- and pressure gauge diaphragms
- Solid or hollow balls, balls mit metal insert
- Tubes, rods, profiles, bars, plates
- customer-driven parts

Examples



Quick Couplings, PFA-/PFA-AS-lined



Solid Ball, Insert for reducing flange, **Liner** for butterfly valve
all parts made of virgin PTFE

In order to assure a high quality standard on linings or molded parts, only virgin fluoropolymer materials are used in our production processes (no re-generated or re-worked materials).

On lined components the plastomeric material is anchored into grooves at several points of the metallic part. This proven system allows to apply such components even under vacuum conditons.