



FILTERS
EXPANSION JOINTS

Filters in cast iron PN 16

N 92500 with flanged outlets
N 92510 with thread outlets

Materials

Body and bonnet in cast iron - bucket in stainless steel.

Features

- Y shaped body;
 - Bolted bonnet for Item N. 92500 and screwed bonnet for Item N. 92510;
 - Extractable bucket;
 - Drainage plug on the body on request.
- UNI flanges PN 16 with raised face and seal groove, or gas thread socket outlets.

Filters in steel PN 40

N 92520 with flanged outlets
N 92530 with thread outlets

Materials

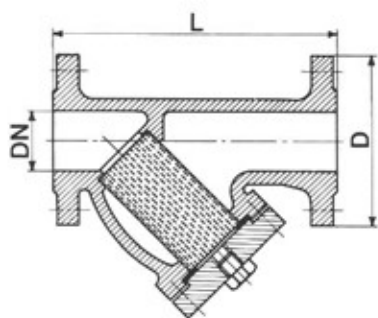
Body and bonnet in steel - bucket in stainless steel.

Features

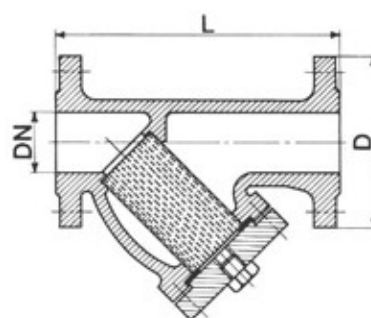
- Y shaped body;
 - Bolted bonnet for Item N. 92520 and screwed bonnet for Item N. 92530;
 - Extractable bucket;
 - Drainage plug on the body on request.
- UNI flanges PN 16 with raised face and seal groove, or gas thread socket outlets.

Art. 92500 92510 PN 16	Test pressure: 24 bar Working pressure: 16 bar up to 120°C For other temperatures see Table UNI 1284													
	DN	15 1/2	20 3/4	25 1	32 1 1/4	40 1 1/2	50 2	65 -	80 -	100 -	125 -	150 -	175 -	200 -
D	95	105	115	140	150	165	185	200	220	250	285	315	340	
L	130	150	160	180	200	230	290	310	350	400	480	550	600	
L ₁	88	110	125	125	150	160	-	-	-	-	-	-	-	

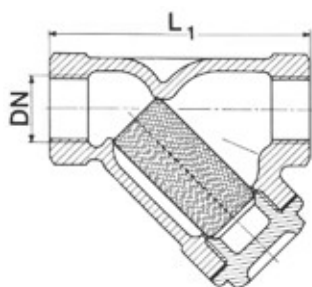
Art. 92520 92530 PN 40	Test pressure: 60 bar Working pressure: 40 bar up to 120°C For other temperatures see Table UNI 1284													
	DN	- 3/8	15 1/2	20 3/4	25 1	32 1 1/4	40 1 1/2	50 2	65 -	80 -	100 -	125 -	150 -	175 -
D	-	95	105	115	140	150	165	185	200	235	270	300	350	375
L	-	130	150	160	180	200	230	290	310	350	400	480	550	600
L ₁	90	90	110	110	198	-	-	-	-	-	-	-	-	-



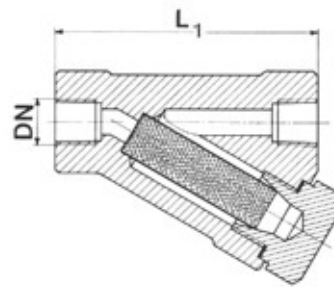
Art. 92500



Art. 92520



Art. 92510



Art. 92530

Filters in bronze PN 10

N 92560 with flanged outlets
N 92570 with thread outlets

Materials

Body and bonnet in bronze - bucket in stainless steel.

Features

Y shaped body - bonnet screwed on the body
 extractable bucket .
 UNI flanges PN 10 or PN 6 on request - gas thread sockets

Floodgate filter in bronze PN10 with thread outlets

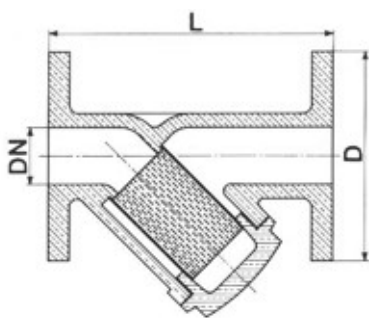
N 92590

Materials

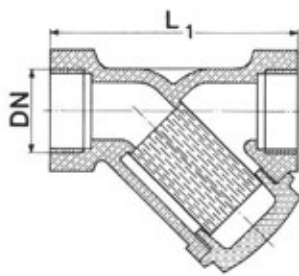
Body and bonnet in bronze - flat floodgate with stainless steel net - gas thread socket outlets.

DN 1/2 - 3/4 - 1 - 1 1/4

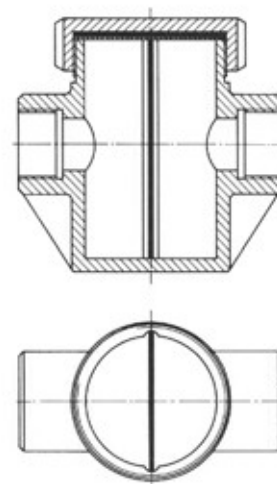
Art. 92560 92570	Test pressure: 16 bar Working pressure: 10 bar up to 40°C; 5 bar at 250°C For other temperatures see Table UNI 1284										
	PN 16										
DN	-	15	20	25	32	40	50	65	80	-	100
	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
D (PN 6)	-	80	90	100	120	130	140	160	190	-	210
D (PN 10)	-	95	105	115	140	150	165	185	200	-	220
L	-	90	115	130	145	170	190	210	220	-	260
L ₁	55	60	70	85	100	110	130	150	170	200	220



Art. 92560



Art. 92570



Art. 92590

Bellows expansion joints PN 16

- N 92600** **with short type - flanged outlets**
- N 92610** **with long type - flanged outlets**
- N 92620** **with short type - welding outlets**
- N 92630** **with long type - welding outlets**

Other nominal pressures on request

Materials

Flanges and welding parts in steel - bellows in stainless steel AISI 304 or 321 for other temperatures. On request, the bellows can be supplied in stainless steel, special alloys, or with outside and inside wall in special alloy.

Features

The bellows is multiple - walled in order to ensure maximum flexibility, and it has no weldings on the circumference. The compensator must always be installed between two fixed points, as it cannot absorb the inside pressure force. It can absorb axial contractions or expansions, and can also be usefully employed as disassembling joint in order to replace the components of a piping (e.g. valves), especially in case of fixed flanges.

Options

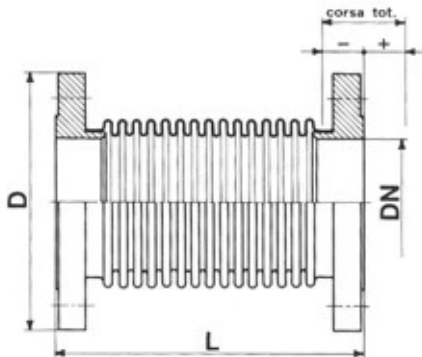
C with steel conveyer it, which is installed inside the bellows, avoids the direct contact between fluid and bellows and it is advisable when there is a danger of erosion or when it is necessary to reduce the pressure drops or the bellows temperature. It is also advisable with highly viscous fluids.

Working pressures

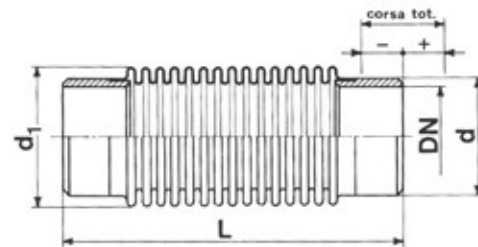
The working pressure must lower proportionally to the raising temperature and will be reduced to half of the nominal pressure when the temperature reaches 500 °C. For higher temperature, please consult our Technical Office.

Strokes

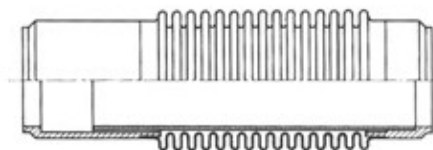
The admissible strokes at 25°C are shown in Table. The admissible stroke lowers proportionally to the raising temperature, and will be reduced to 70% at 300 °C; this reduce value can be applied up to 500°C. For higher temperatures please consult our Technical Office.



Art. 92600
92610



Art. 92620
92630



Variante C

Art. 92600 92620		Short type					
DN	D	d	d ₁	L	Stroke mm		
					-	+	Totale
20	105	26,9	32	180	15	5	20
25	115	33,7	40	180	15	5	20
32	140	42,4	50	190	19	6	25
40	150	48,3	56	190	22	8	30
50	165	60,3	70	205	22	8	30
65	185	76,1	87	215	22	8	30
80	200	88,9	100	215	22	8	30
100	220	114,3	127	215	22	8	30
125	250	139,7	152	250	26	9	35
150	285	168,3	175	250	26	9	35
200	340	219,1	235	280	30	10	40
250	405	273,0	290	280	30	10	40
300	460	323,9	345	320	37	13	50

Art. 92610 92630		Long type					
DN	D	d	d ₁	L	Stroke mm		
					-	+	Totale
20	105	26,9	32	200	19	6	25
25	115	33,7	40	200	19	6	25
32	140	42,4	50	215	22	8	30
40	150	48,3	56	215	26	9	35
50	165	60,3	70	270	30	10	40
65	185	76,1	87	270	30	10	40
80	200	88,9	100	270	33	12	45
100	220	114,3	127	320	37	13	50
125	250	139,7	152	320	37	13	50
150	285	168,3	175	320	37	13	50
200	340	219,1	235	350	43	15	58
250	405	273,0	290	350	43	15	58
300	460	323,9	345	440	58	19	77

Neoprene expansion joints PN 10

N 92650 with flanged outlets
N 92660 with thread outlets

Materials

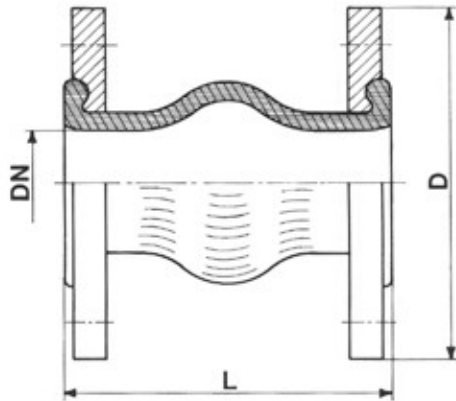
Socket in neoprene with nylon cloth reinforcements - galvanized steel flanges - unions in three pieces in galvanized malleable iron.

Features

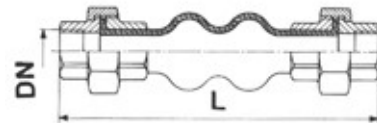
The neoprene socket allows compression and expansion axial compensations (lateral and angular); it is thus possible to compensate frame or ground settling measurement, assembling faults, or thermic expansions in the pipings. Noise and vibrations are also absorbed, hindering their propagation through the pipings.

The rotating flanges are sized and drilled according to UNI PN 10 Tables; the bolts must be inserted with their heads towards the inside part of the joint, so that they cannot come in contact with the rubber socket even after the possible deformations.

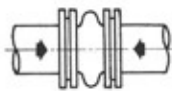
The unions in three pieces are gas threaded. During the assembling phase, avoid twisting the rubber socket.



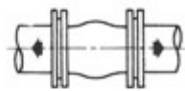
Art. 92650



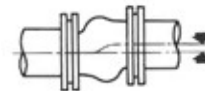
Art. 92660



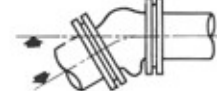
Axial movement of compression



Axial movement of extension



Lateral Movement



Angular Movement

Art. 92650	Working pressure: 10 bar from -30°C up to +110°C					
PN 10	Maximum depressure: 740 mm Hg					
DN	Free lenght L	D	Movements (not contemporaneous)			
			Compression mm	Extension mm	Lateral ± mm	Angular ± degree
32	95	140	12	6	6	20
40	95	150	12	6	6	20
50	120	165	16	10	10	20
65	128	185	16	10	10	20
80	157	200	16	13	13	20
100	157	220	22	13	13	20
125	157	250	22	13	13	20
150	157	285	22	13	13	20
200	157	340	22	13	13	20
250	208	395	32	19	19	20
300	208	445	32	19	19	20

Art. 92660	Working pressure: 10 bar from -20°C up to +30°C; 7 bar at 105°C				
PN 10	Maximum depressure: 650 mm Hg				
DN	Free lenght L	Movimenti (non contemporanei)			
		Compression mm	Extension mm	Lateral ± mm	Angular ± degree
3/4	200	22	6	22	45
1	200	22	6	22	45
1 1/4	200	22	6	22	45
1 1/2	200	22	6	22	45
2	200	22	6	22	45
2 1/2	200	22	6	22	45
3	200	22	6	22	45

Telescope expansion joint

N 92680

In bronze - cap grand - amianthus gasket - gas thread socket outlets

Antivibration joint PN 16 with flanged outlets

N 92700

Other nominal pressure on request

Materials

Bellows in stainless steel AISI 321 - flanged ends in steel - sheath made up by interlaced stainless steel threads.

Features

The bellows is multiple walled in order to supply the maximum flexibility and it has no weldings on its circumference. The outside sheath absorbs the pressure force. The joint is suitable to eliminate the vibrations caused by pumps, compressors, diesel motors etc.

Flanges sized and drilled according to UNI PN 16 Tables.

Antivibration joint PN 16 with welding outlets

N 92710

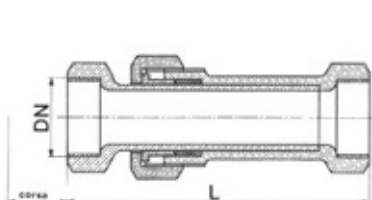
Materials and features as in item N 92700

Art. 92680	Working pressure: 16 bar up to 40°C; 8 bar at 250°C For other temperatures see Table UNI 1284								
DN	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
L	120	135	145	160	170	185	210	220	280
Corsa	40	40	45	45	50	55	65	70	90

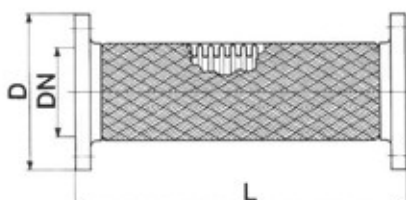
Art. 92700							
DN	80	100	125	150	200	250	300
D	200	220	250	285	340	405	460
L*	235	255	260	270	310	360	360

(* Other lengths on request.

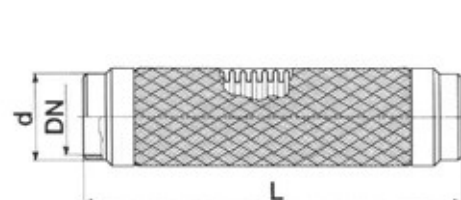
Art. 92710								
DN	15	20	25	32	40	50	65	80
d	21,3	26,9	33,7	42,4	48,3	60,3	70,0	88,9
L	270	300	320	320	360	360	400	400



Art. 92680



Art. 92700



Art. 92710

Angular expansion joints bellows PN 16

N 92740 with flanged outlets
N 92760 with thread outlets

Materials

Flanges or welding outlets and link rods in steel - bellows in stainless steel AISI 304 or 321 for high temperatures.

Features

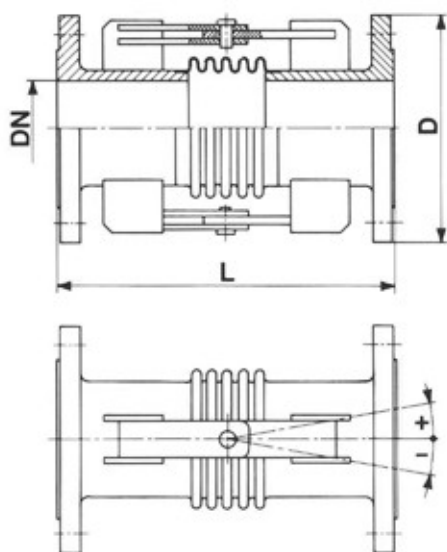
The multiple - walled bellows offers maximum flexibility. The compensator can absorb the inside pressure force, provided that its two hands are linked by hinged rods which contrast the axial deformations allowing, on the other side, great angular deformations.

The best employ of this joint is obtained in the compensation of linear expansion in pipings having some right angles, as shown in th assembling scheme.

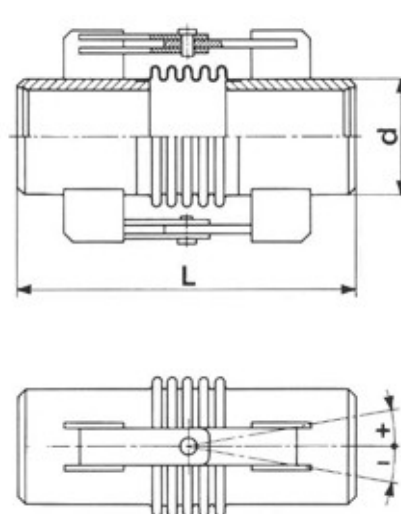
The joint should be installed about 1 m. far from the piping angle.

UNI PN 16 flanges or buttwelding outlets.

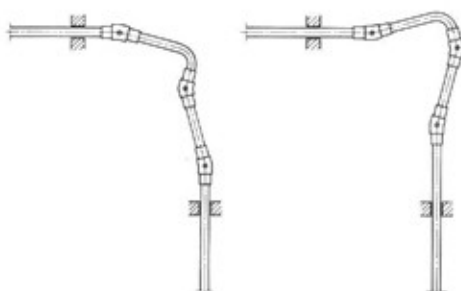
Art. 92740 92760	Working pressure : 16 bar - cold ; 8 bar at 500 °C For other temperatures please consult our Technical Office			
PN 16				
DN	D	d	L	Angular deformation ± α
40	150	48,3	265	20°
50	165	60,3	300	19°
65	185	76,1	300	16°
80	200	88,9	320	14°
100	220	114,3	320	11°
125	250	139,7	360	10°
150	285	168,3	400	10°
200	340	219,1	490	8°
250	405	273,0	520	6°
300	460	323,9	560	6°



Art. 92740



Art. 92760



cold

warm

Dismantling joints

N 92780 two flanges type
N 92790 three flanges type

Materials

Joints wholly made in steel with rubber gasket.

Features

The gage of this joints can be varied within certain limits by acting on the assembling tie-rods. The stroke "C" of

the two flanges type is limited to 5 mm for all sizes, while in the three flanges type it can be adjusted from 30 to 140 mm according to the DN.

These joints allow the disassembling and the successive re-assembling of valves filters, etc. on rigid pipings, an operation which is very difficult if not impossible especially on great diameter pipings.

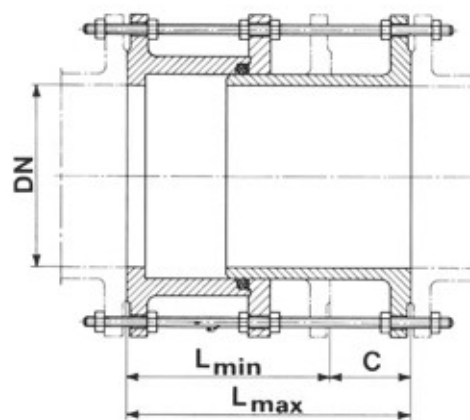
With the three flanges model it is even possible (within the stroke limits) to replace a vlve with another one having a slightly different gage.

The joints can be supplied in series UNI PN 6 - 10 - 16 - 25 - 40 and ANSI 150 - 300 for DN between 100 and 2000.

DN	Art. 92780 Two flange type		Art. 92790 Three flanges type		
	L	C	L _{max}	L _{min}	C
100	95	5	200	170	30
125	95	5	200	170	30
150	105	5	200	170	30
200	115	5	220	190	30
250	115	5	220	190	30
300	115	5	220	190	30
350	125	5	220	190	30
400	135	5	250	220	30
450	135	5	250	220	30
500	135	5	280	240	40
600	150	5	280	240	40
700	150	5	320	270	50
800	180	5	320	270	50
900	180	5	350	290	60
1000	210	5	350	290	60
1200	210	5	400	320	80
1400	230	5	450	360	90
1600	250	5	500	400	100
1800	250	5	550	430	120
2000	250	5	600	460	140



Art. 92740



Art. 92760