



**CMO VALVES**  
manufacturing the valve you need

# 41A SERIES



## FABRICATION RANGE *RUBBER EXPANSION JOINTS*

### UTILIZATION:

- Rubber expansion joints used to absorb and recuperate the deformations in the pipeline. Their design allows the longitudinal, transversal and angular movements.
- It has minimum head loss, it is total bore and 100% water tight.

# 41- SERIES

## RUBBER EXPANSION JOINTS

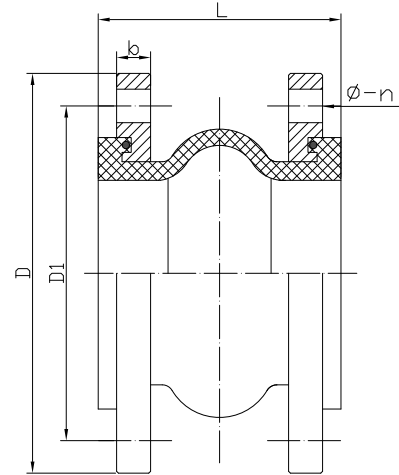


### MAIN FEATURES:

- Minimum head loss.
- Full bore.
- 100% water tight.
- Bidirectional flow.
- No gaskets needed for installation.
- Breaking pressure over 60 bar.
- Working temperature between -10°C and 80°C.

### STANDARDS APPLIED:

- Hydrostatic tests according to EN 12266-1, class A.
- Side flanges according to ISO 7005-1.



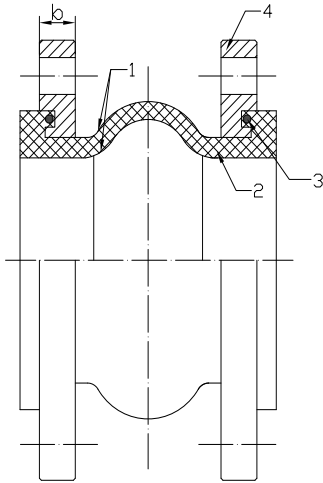
### SINGLE WAVE DIMENSIONS

DN	L	Weight	PN 10				PN 16				DISPLACEMENT			
			D	D1	b	φ-n	D	D1	b	φ-n	Extens.	Compr.	Transv.	Angle
32	95	2,6	140	100	14	18-4	140	100	14	18-4	6	9	9	15°
40	95	3,1	150	110	14	18-4	150	110	14	18-4	6	10	9	15°
50	105	4,2	165	125	15	18-4	165	125	15	18-4	7	10	10	15°
65	115	5,2	185	145	15	18-4	185	145	15	18-4	7	13	11	15°
80	130	6,2	200	160	17	18-8	200	160	17	18-8	8	15	12	15°
100	135	7,5	220	180	17	18-8	220	180	17	18-8	10	19	13	15°
125	170	10,3	250	210	19	18-8	250	210	19	18-8	12	19	13	15°
150	180	12,8	285	240	19	22-8	285	240	19	22-8	12	20	14	15°
200	205	18,6	340	295	21	22-8	340	295	21	22-12	16	25	22	15°
250	240	27,2	395	350	23	22-12	405	355	23	26-12	16	25	22	15°
300	260	34,5	445	400	22	22-12	460	410	24	26-12	16	25	22	15°
350	255	45,6	505	460	22	22-16	520	470	26	26-16	16	25	22	15°
400	255	58,4	565	515	22	26-16	580	525	28	30-16	16	25	22	15°
450	255	68,0	615	565	22	26-20	640	585	28	30-20	16	25	22	15°
500	255	90,2	670	620	24	26-20	715	650	30	33-20	16	25	22	15°
600	260	122,5	780	725	23	30-20	840	770	31	36-20	16	25	22	15°

The images and drawings are non contractual.  
The specifications of the shown products could vary without previous notice.

# 41- SERIES

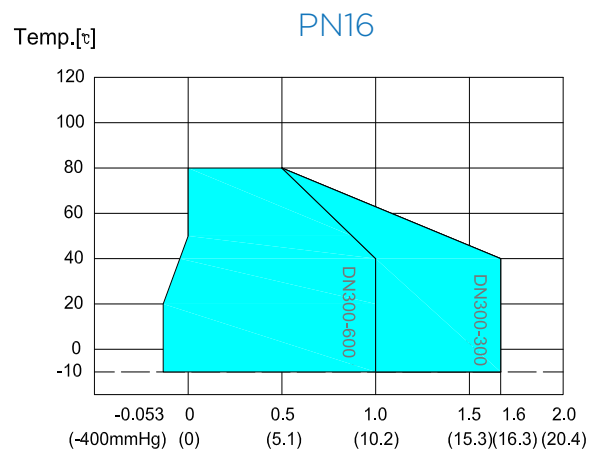
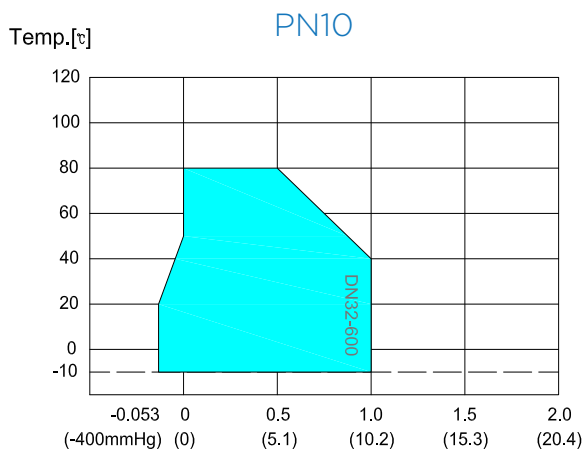
## RUBBER EXPANSION JOINTS



### DESCRIPTION

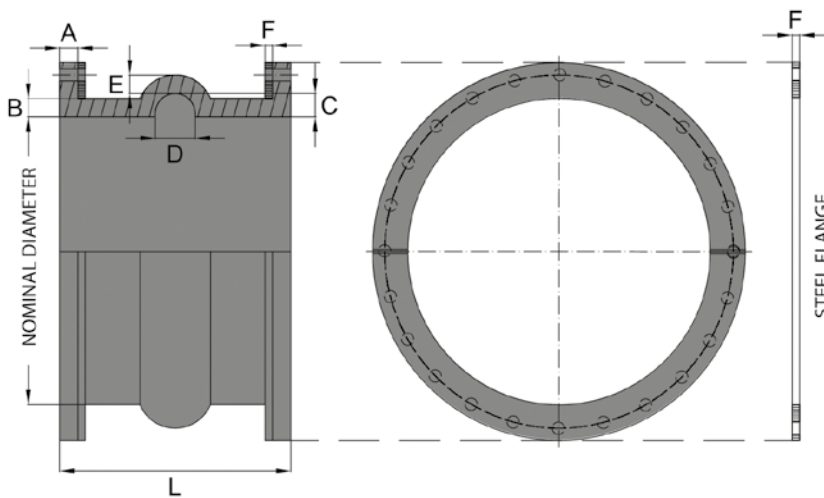
1	RUBBER	EPDM / NBR
2	KEY FRAME	CORD FABRIC
3	PRESSURIZED RING	STEEL WIRE STRAND
4	FLANGE	Q235

### WORKING PRESSURE / TEMPERATURE TABLE



# 41- SERIES

## RUBBER EXPANSION JOINTS



### DESCRIPTION

1	BODY	EPDM
2	CLAMPING RING	CARBON STEEL

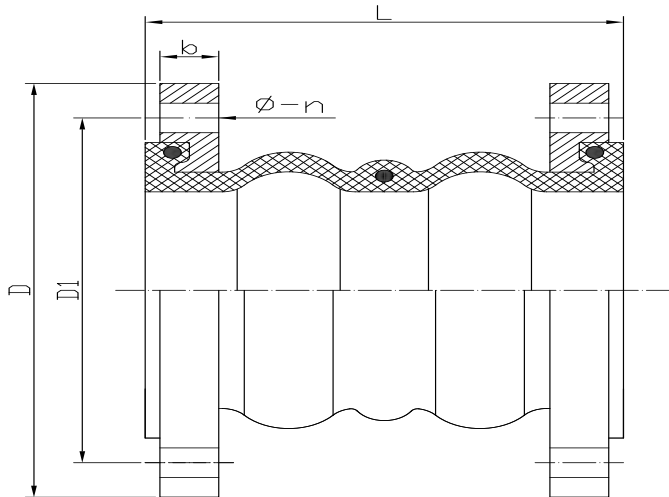
### BIG DIAMETER DIMENSIONS

DN	L	L Min	L Max	T (+-)	a°	A	B	C	D	E	F	Máx. Pressure	Weight
700	250	225	262	12	2.0	25.4	30	57	45	20.5	9.5	7.5 Bar	47
800	250	225	262	12	1.9	25.4	30	57	45	20.5	9.5	6.5 Bar	65
900	250	225	262	12	1.7	25.4	30	57	57	20.5	9.5	6.2 Bar	90
1000	250	225	262	12	1.5	25.4	30	57	57	20.5	9.5	6.2 Bar	141
1100	300	272	314	12	1.5	30	31.75	63.5	57	23	9.5	6.2 Bar	159
1200	300	272	314	12	1.5	30	31.75	63.5	57	23	9.5	6.2 Bar	175
1300	300	272	314	12	1.3	30	35	63.5	57	23	9.5	5.8 Bar	187
1400	300	272	314	12	1.0	30	35	63.5	57	23	9.5	5.8 Bar	198
1500	300	272	314	12	1.0	30	35	63.5	57	23	9.5	5.8 Bar	209
1600	300	272	314	12	1.0	30	35	63.5	57	23	9.5	5.8 Bar	221
1800	300	272	314	12	1.0	30	35	63.5	57	23	9.5	5.8 Bar	243



# 41- SERIES

## RUBBER EXPANSION JOINTS

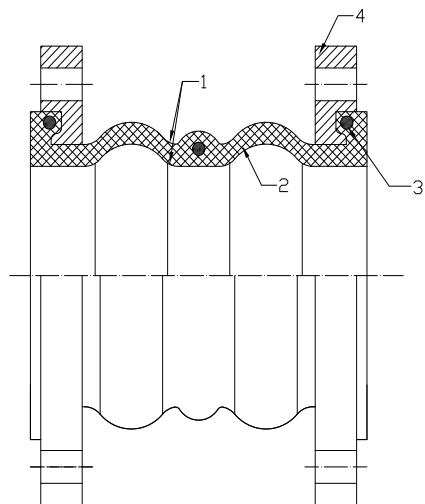


### DOUBLE WAVE DIMENSIONS

DN	L	Weight	PN 10				PN 16				DISPLACEMENTS			
			D	D1	b	Φ-n	D	D1	b	Φ-n	Extens.	Compr.	Transv.	Ang.
40	175	3,1	150	110	14	18-4	150	110	14	18-4	10	20	20	15°
50	175	4,3	165	125	15	18-4	165	125	15	18-4	10	20	20	15°
65	175	5,4	185	145	15	18-4	185	145	15	18-4	10	20	20	15°
80	175	6,5	200	160	17	18-8	200	160	17	18-8	10	20	20	15°
100	225	8,1	220	180	17	18-8	220	180	17	18-8	15	30	25	15°
125	225	10,8	250	210	19	18-8	250	210	19	18-8	15	30	25	15°
150	225	13,4	285	240	19	22-8	285	240	19	22-8	15	30	25	15°
200	325	21,1	340	295	21	22-8	340	295	21	22-12	20	40	30	15°
250	325	27,3	395	350	23	22-12	405	355	23	26-12	20	40	30	15°
300	325	31,0	445	400	22	22-12	460	410	24	26-12	20	40	30	15°

# 41- SERIES

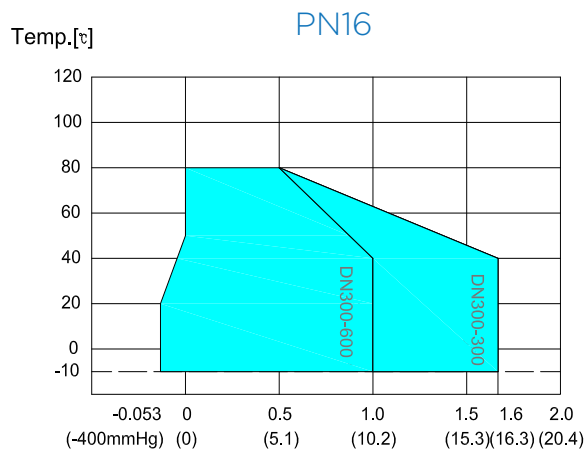
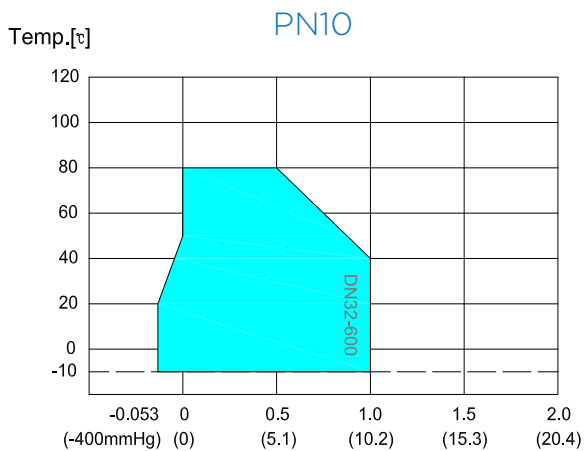
## RUBBER EXPANSION JOINTS



### DESCRIPTION

1	RUBBER	EPDM / NBR
2	INTERNAL REINFORCEMENT	FABRIC
3	PRESSURE RING	STEEL WIRE
4	FLANGES	Q235

### WORKING PRESSURE / TEMPERATURE TABLE

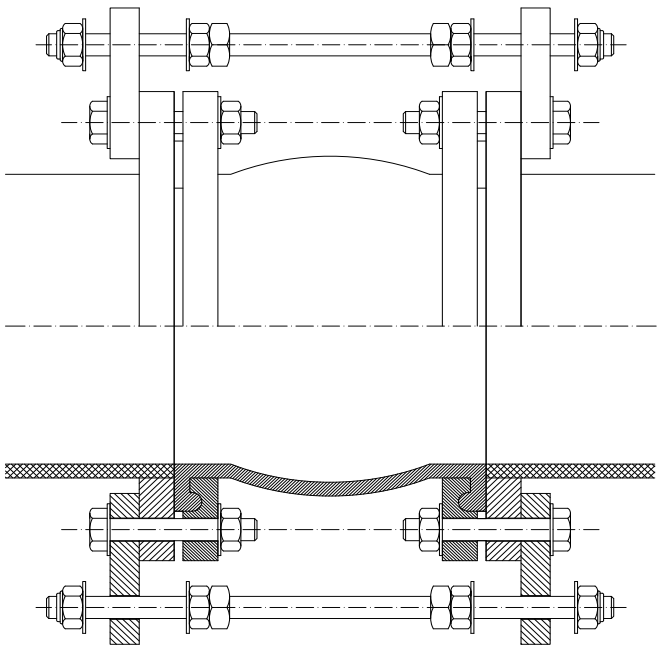
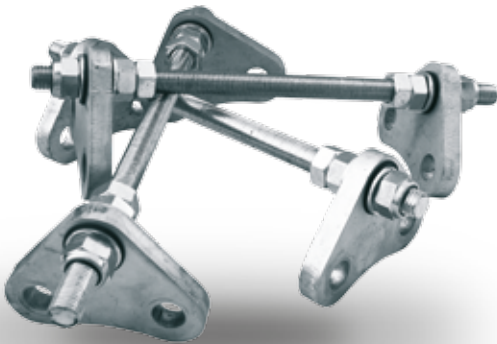


# 41- SERIES

## RUBBER EXPANSION JOINTS



### SECURITY TIE RODS



For the correct working of the rubber expansion joints, security tie rods must be installed according to the tables below.

#### NUMBER OF SECURITY TIE RODS ACCORDING TO THE PN

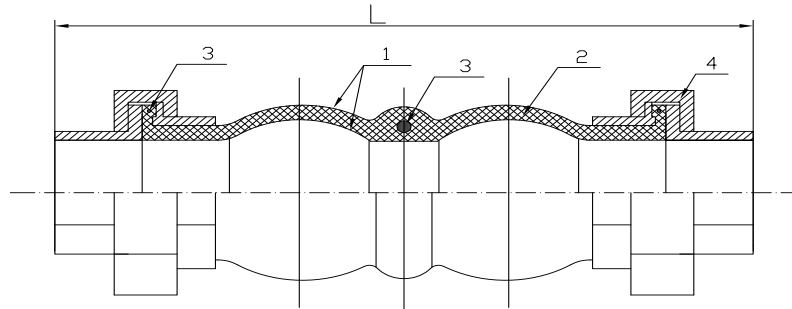
DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN10	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4
PN16	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4

#### NUMBER OF SECURITY TIE RODS ACCORDING TO THE WORKING PRESSURE

DN	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
4 TIE RODS	7 BAR	6BAR	6BAR	6BAR	6BAR	6BAR	5 BAR	5 BAR	4 BAR	4 BAR	3 BAR
6 TIE RODS	-	-	-	-	-	-	6 BAR	6 BAR	6 BAR	6 BAR	6 BAR

# 41- SERIES

## RUBBER EXPANSION JOINTS



### THREADED RUBBER EXPANSION JOINTS DIMENSIONS

DN	L	Weight	DISPLACEMENTS			
			Extens.	Compr.	Transv.	Ang.
15	200	0,7	6	22	22	30°
20	200	0,9	6	22	22	30°
25	200	1,2	6	22	22	30°
32	200	1,4	6	22	22	30°
40	200	2,0	6	22	22	30°
50	200	2,5	6	22	22	30°
65	225	3,7	6	24	24	30°
80	225	5,0	6	24	24	30°

DESCRIPTION		
1	RUBBER	EPDM / NBR
2	INTERNAL REINFORCEMENT	FABRIC
3	PRESSURE RING	STEEL WIRE
4	THREADED ENDS	CAST IRON

### WORKING PRESSURE / TEMPERATURE TABLE

