



DAVINCI TECHNICAL DATA GUIDE

# RUBBER EXPANSION JOINTS

## DOUBLE SPHERE FLANGED ENDS

Ref. 221A-CM / PN 10-16

CE



### Application

Heating and HVAC systems.  
Cooling and overheated water circuits.  
Pumping stations.  
Compressor connections.  
Industrial and marine piping systems.

### Approvals/Standards

Flanges according to ISO 7005-1.  
Mounting between flanges: PN10/16 EN 1092-2, ISO 7005-2.  
Pressure Tests acc. to EN 12266-1 Rate A. GB/T13927-1992  
Pressure Tests: Body: 1,5 x PN  
Products excluded from directive directive 2014/68/EU Equipment under pressure (Article 4&3).

### Certifications

CE

### Range

DN40-600, PN10-16



## GENERAL CHARACTERISTICS

Range from DN40 up to DN600

Full bore.

Double wave construction for minimum head loss.  
Designed to absorb vibration and noises in fluid conduction pipelines.

Made with a special moulding technique using synthetic fiber of high resistance to reinforce the body, can support a braking pressure of more than 60 bar, even if the usual working pressure is not above 16 bar.

Installation in horizontal and vertical position.

## WORKING CONDITIONS

Maximum working pressure: 16 bar.

Working pressure: 10 bar.

Working temperature: -5°C +105°C (for EPDM).

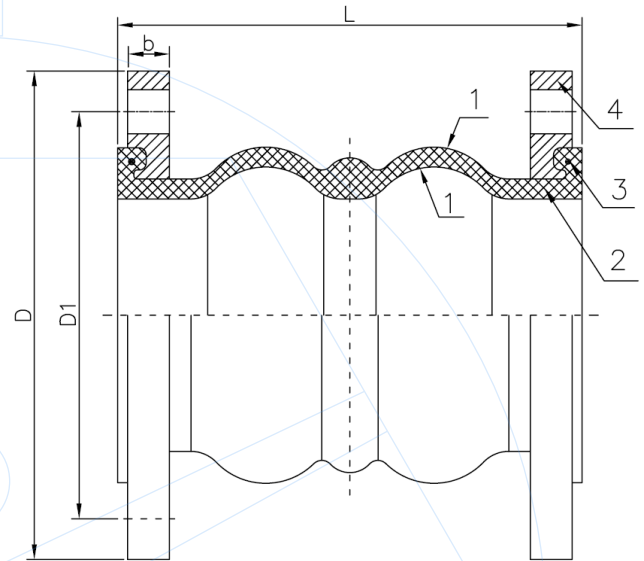
Vacuum pressure: 400 mmHg.

Suitable media: water.

Consult factory for other applications.

Nº	ITEM	MATERIAL
1	Outer / Innet rubber	EPDM
2	Key frame	Cord fabric
3	Reinforcing ring	Steel wire strand
4	Flange	Q235

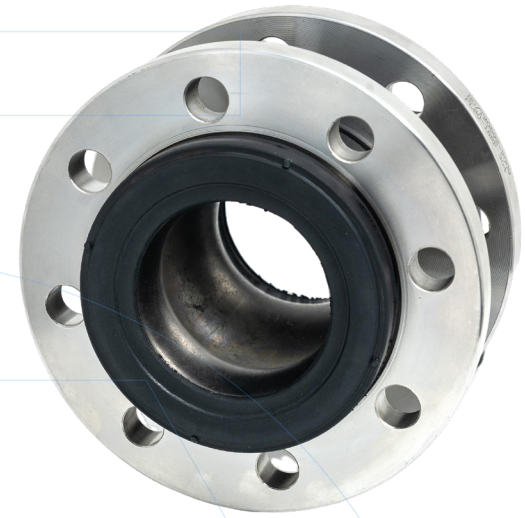
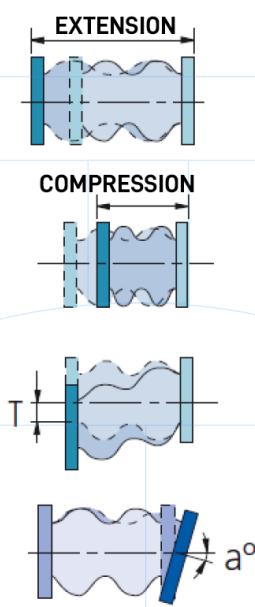
Components may be replaced with materials of equivalent or superior grade without prior notice, in accordance with our continuous improvement policy.



DN	L	D		D1		b		n-Ød		Weight (kg)
		PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16	
40	175	150		110		14		4-18		3.1
50	175	165		125		15		4-18		4.3
65	175	185		145		15		4-18		5.4
80	175	200		160		17		8-18		6.5
100	225	220		180		17		8-18		8.1
125	225	250		210		19		8-18		10.8
150	225	285		240		19		8-22		13.4
200	325	340		295		21		8-22	12-22	21.1
250	325	395	405	350	355	23		12-22	12-26	27.3
300	325	445	460	400	410	22	24	12-22	12-26	31.0
350	350	505	520	460	470	22	26	16-22	16-26	48.0
400	350	565	580	515	525	22	28	16-26	16-30	60.0
450	350	615	640	565	585	22	28	20-26	20-30	76.0
500	350	670	715	620	650	24	30	20-26	20-30	94.0
600	350	780	840	725	770	23	31	20-30	20-36	130.0



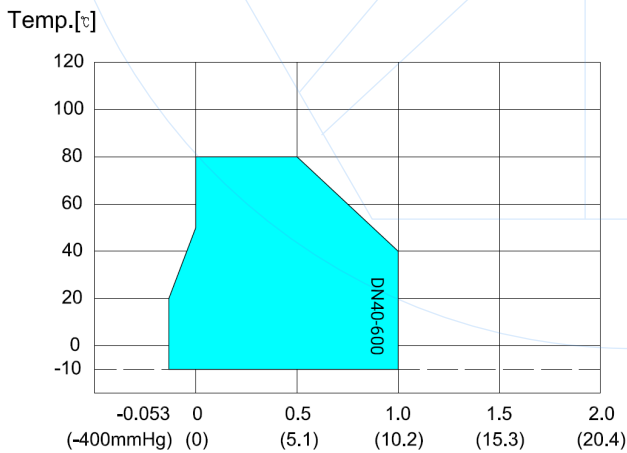
DN	Allowed movement			
	Exten.	Compr.	Transv.	Angle
40	10	20	20	15°
50	10	20	20	15°
65	10	20	20	15°
80	10	20	20	15°
100	15	30	25	15°
125	15	30	25	15°
150	15	30	25	15°
200	20	40	30	15°
250	20	40	30	15°
300	20	40	30	15°
350	20	40	30	15°
400	20	40	30	15°
450	25	45	30	15°
500	25	45	30	15°
600	25	45	30	15°



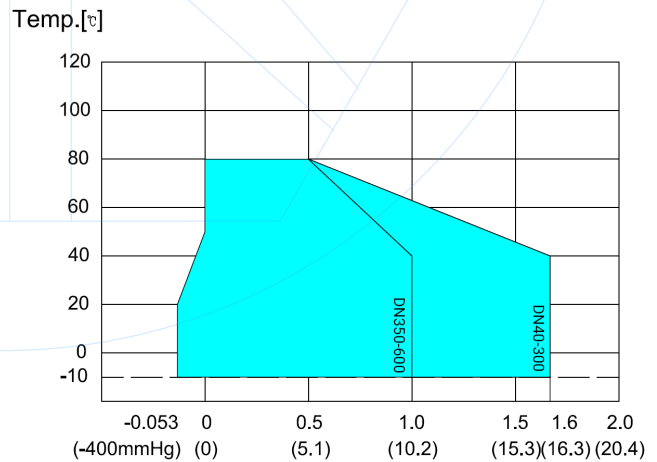
TEMPERATURE/PRESSURE RATE FOR EPDM

Highest temperature and working pressure						
DN	80°C	85°C	90°C	95°C	100°C	105°C
40 - 300	15 bar	12 bar	10 bar	7 bar	4 bar	2 bar
350 - 600	10 bar	8 bar	7 bar	5 bar	2 bar	1 bar

PN10 RUBBER EXPANSION JOINTS TEMPERATURE/PRESSURE CHART



PN10 RUBBER EXPANSION JOINTS TEMPERATURE/PRESSURE CHART



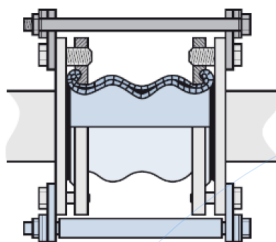


## SECURITY TIE RODS

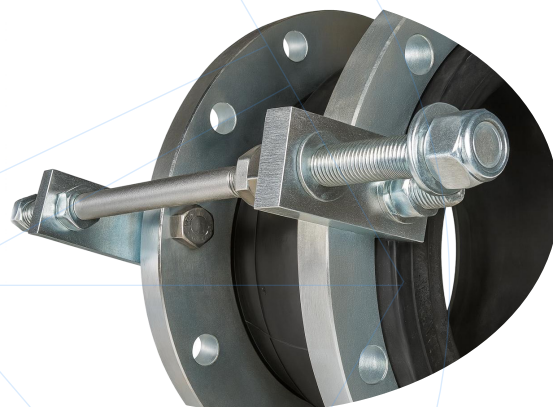
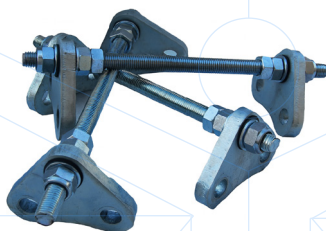
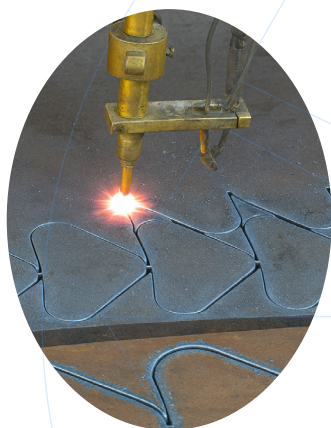
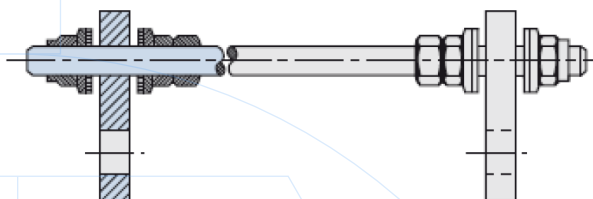
NEED FOR SECURITY TIE RODS BASED ON WORKING PRESSURE

DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PRESSURE (BAR)	15	15	15	15	10	10	10	7	7	7	7	5	5	5	5

Assembly position



Tie rods include nuts and washers





CONTACT US

# DAVINCI VALVES ORDER REQUEST

Ref. 221A-CM / PN 10-16



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