

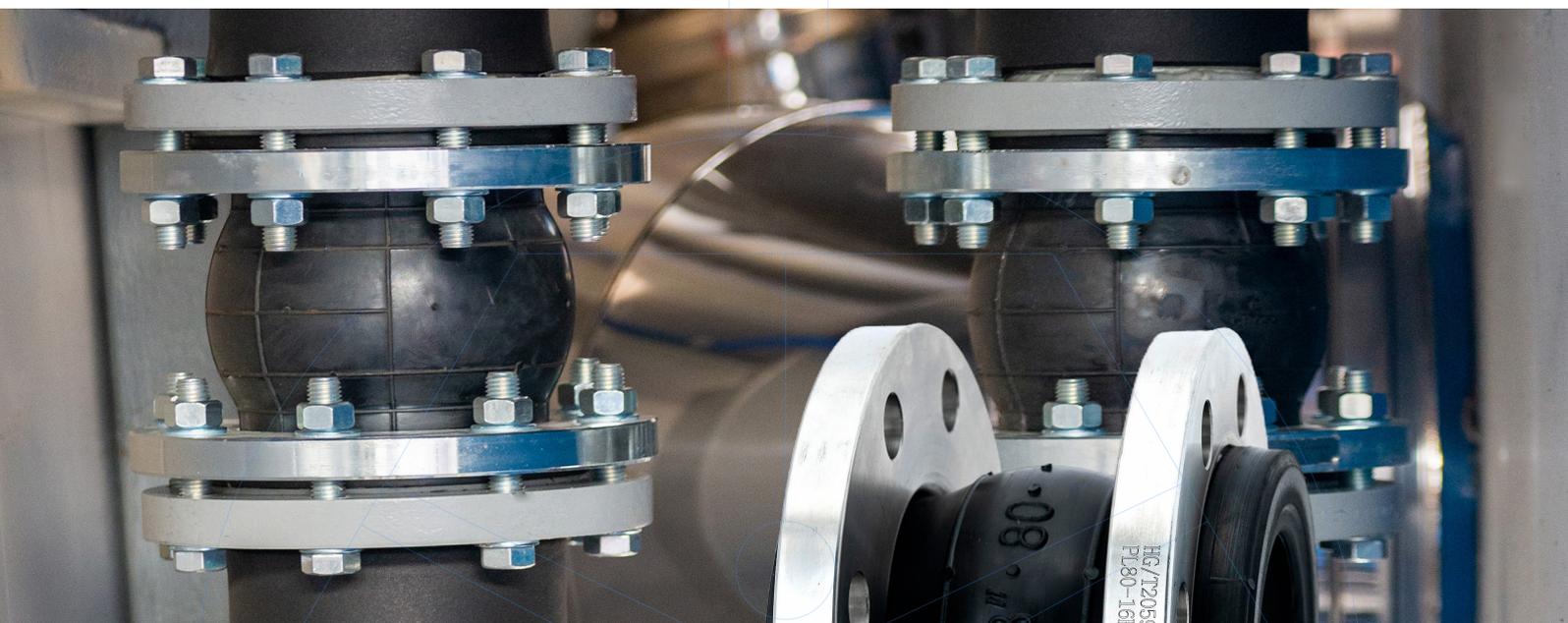


DAVINCI TECHNICAL DATA GUIDE

RUBBER EXPANSION JOINTS

SINGLE SPHERE FLANGED ENDS, WRAS

Ref. 221B-WH / PN 10-16



Application

Drinking water supply.
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. Seat: 1,1 x PN
Products excluded from directive directive 2014/68/EU Equipment under pressure (Article 4&3).

Certifications

WRAS, CE

Range

DN32-600, PN10-16



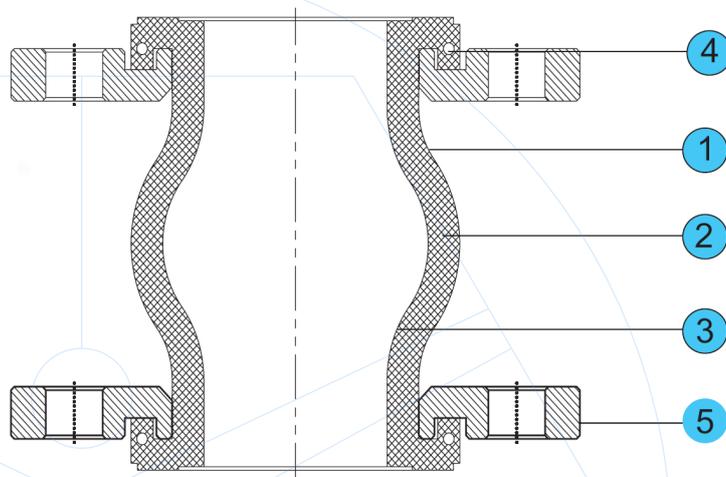
GENERAL CHARACTERISTICS

Range from DN32 up to DN1200
 Full bore.
 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.
 Installation in horizontal and vertical position.
 With floating flange, easy to install.
 Allow for 4 way movement.

WORKING CONDITIONS

Burst pressure:
 55 bar for DN32-300.
 40 bar for DN350-600
 Working temperature: -5°C +105°C
 Suitable media: water.
 Consult factory for other applications.

Nº	ITEM	MATERIAL
1	Body	EPDM
2	Reinforcing fabric	Nylon
3	Tube	EPDM
4	Retaining ring	Steel wire
5	Flange	Carbon Steel / AISI304



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

TEMPERATURE/PRESSURE RATE FOR EPDM

DN	Highest temperature and working pressure					
	80°C	85°C	90°C	95°C	100°C	105°C
32 - 300	15 bar	12 bar	10 bar	7 bar	4 bar	2 bar
300 - 600	10 bar	8 bar	7 bar	5 bar	2 bar	1 bar

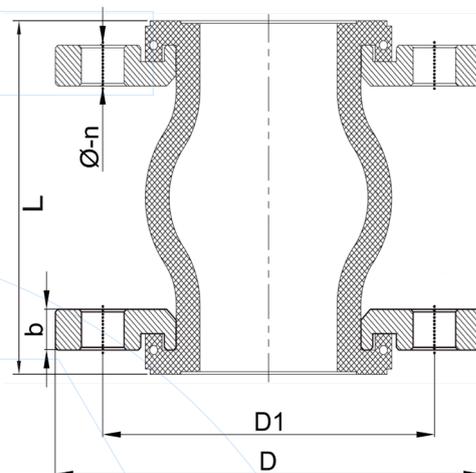




DIMENSIONS

221B-WH SINGLE SPHERE FLANGED ENDS

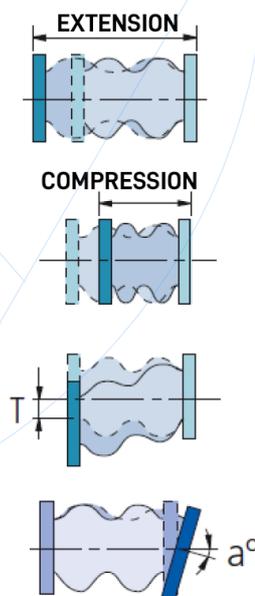
DN	L	D		D1		b		n-Ød		Weight (kg)
		PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16	
32	95	140		100		14		4-18		3.0
40	95	150		110		14		4-18		3.7
50	105	165		125		15		4-18		4.2
65	115	185		145		15		4-18		5.4
80	130	200		160		17		8-18		6.3
100	135	220		180		17		8-18		7.0
125	170	250		210		19		8-18		9.6
150	180	285		240		21		8-22		13.0
200	205	340		295		21		8-22	12-22	17.3
250	240	395	405	350	355	23		12-22	12-26	17.6
300	260	445	460	400	410	23	25	12-22	12-26	22.9
350	255	505	520	460	470	25	28	16-22	16-26	27.5
400	255	565	580	515	525	25	30	16-26	16-30	46.5
450	255	615	640	565	585	26	30	20-26	20-30	48.7
500	255	670	715	620	650	28	30	20-26	20-30	61
600	260	780	840	725	770	30	30	20-30	20-36	68.5



FOR DN OVER DN600 CHECK DIMENSIONS

The designs, materials and technical specifications indicated herein are subject to modification without prior notice, as part of the continuous development of our manufacturing programme, product refinement and technological advancement.

DN	Allowed movement				Max. Pressure (bar)	Vacuum mm Hg
	Exten.	Compr.	Transv.	Angle		
32	8	6	8	15°	16	660
40	4	8	8	15°	16	660
50	4	8	8	15°	16	660
65	5	8	10	15°	16	660
80	6	12	10	15°	16	660
100	6	12	12	15°	16	660
125	10	18	12	15°	16	660
150	10	18	12	15°	16	660
200	10	18	22	15°	16	660
250	14	25	22	15°	10	660
300	14	25	22	15°	10	660
350	14	25	22	15°	10	660
400	16	25	22	15°	7	660
450	16	25	22	15°	7	660
500	16	25	22	15°	7	660
600	16	25	22	15°	7	660



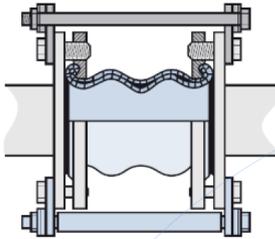


SECURITY TIE RODS

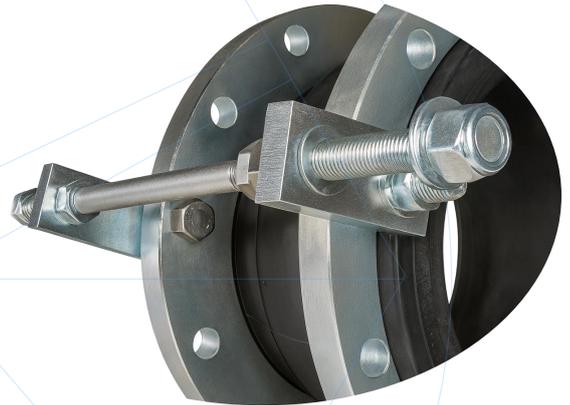
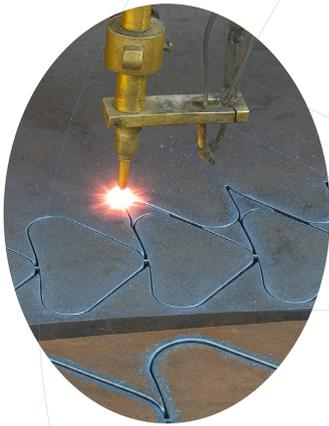
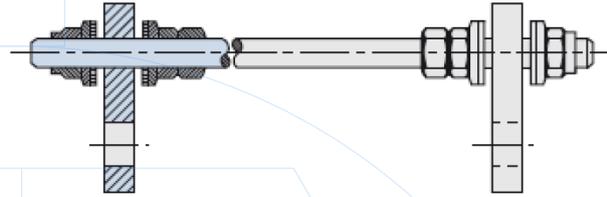
NEED FOR SECURITY TIE RODS BASED ON WORKING PRESSURE

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



CERTIFICATES



This certifies that

DAVINCI VALVES

has had the undermentioned product(s) examined, tested and certified as being of an appropriate quality and standard as required in the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws, subject to scheme requirements being met when installed.

Model Numbers

330 FITTINGS FOR USE WITH TUBE AND PIPE

The certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Approvals Directory www.wras.co.uk/ directory.

The product so mentioned will be valid until the end of:

December 2028

Certificate No. **2312082**



Ian Hughes
WRAS Approvals Manager



Form QAT_10.A6G5, version 02, effective since October 07th, 2022

VERIFICATION




No. 3N240126.DV0511
Test Report / Technical Construction File no. B.5340281.091

Verification's Holder: **DAVINCI VALVES**
18 Dongguo Street, Square One 11th Floor 1101, Jinjiang District, Chengde, Sichuan, China

Verification ECM Mark: 

Product: **DISMANTLING JOINTS DUCTILE IRON**
Model(s): **330**
DN50-DN2000 PN10-PN25

Verification to: Standard: **EN 545:2010**
related to CE Directive(s): **2014/68/EU (Pressure Equipment)**

This document has been issued in accordance with the European Commission's note of 14 September 2022 ref. Area (2022) 5342814 concerning voluntary certifications with non-notified procedure and for products intended for third countries outside the EU market.

The manufacturer has voluntarily decided to submit its documents concerning the above-mentioned product for verification. Erte Certificazione Macchine confirms that the documentation made available and immediately returned to it, or containing sensitive data, meets the essential requirements of the above-mentioned directives. The verification activity carried out exclusively concerned the technical documentation and no verification was carried out on the product. This document cannot replace the EC Declaration of Conformity. The above conformity mark can be affixed to the technical documentation in accordance with the CEI Regulation on its issue and use, published on the website: www.entececm.it/

Issuance date: **26 January 2024**
Expiry date: **26 January 2029**

For online check:



Approver

Erte Certificazione Macchine
Legal Representative
Luca Di Biase



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Verification – Верификация – 验证 – Verification – 증명서 – 验证



CONTACT US

DAVINCI GATE VALVES ORDER REQUEST

Ref. 221B-WH / PN 10-16



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YOUR QUALITY WATER PROJECTS PARTNER
For professionals who look for more.