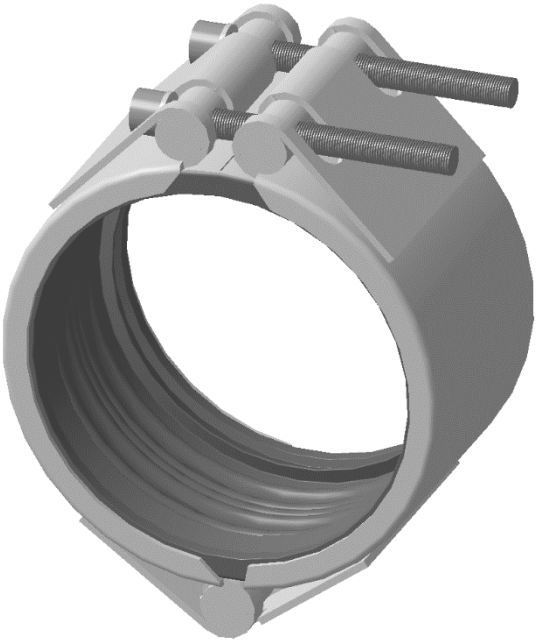
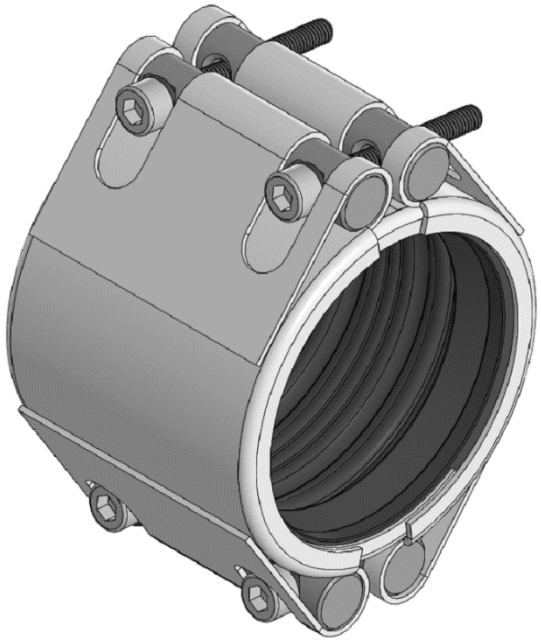
Volzhskiy Zavod
Promyshlennoy Armatury

Pipe coupling (OPEN)





PRODUCT PASSPORT

TU (Technical specifications) 25.99.29-009-21203517-2020

2022

Pipe coupling VZPA (OPEN)

1. General information

The coupling is used to eliminate leaks in pipelines that transport various liquids, including drinking water. It's also used to connect pipes of the same diameter.

They are intended for pipes with an outer diameter from 48.3 mm to 609.6 mm.

Operating temperature range: NBR rubber up to -20C° to +80C°, EPDM rubber from -20C° to +100C°.

2. Product components.

Depending on the diameter, there are two types of couplings produced.

First type. Intended for diameters from 48.3 mm to 168.3 mm. (Fig. 1).
The coupling consists of a body with an insert and a connecting rod, a clamping unit (lock), and a rubber seal.

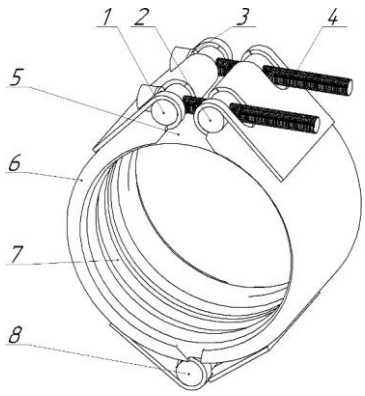
The body has two parts (6) connected by a connecting rod (8). An insert (5) is welded to one of the body parts.

The clamping unit includes clamping (1) and threaded (2) rods, bolts (4), and washers (3).

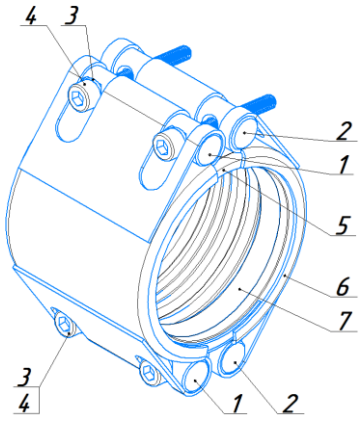
Second type. Intended for diameters from 172 mm to 609.6 mm. (Fig. 2).
The coupling consists of a body, two clamping units (locks), and a rubber seal. (Fig. 2).

The body has two parts (6). An insert (5) is welded to each of the body parts.

The clamping unit includes clamping (1) and threaded (2) rods, bolts (4), and washers (3).



(Fig. 1)



(Fig. 2)

The petal-type rubber seal (7) with silicone treatment can be made of ethylene-propylene rubber diene monomer rubber (EPDM) or nitrile butadiene rubber (NBR). The seal is inserted into the body. The medium with which the clamp may be used depends on the material of the seal. Please visit the manufacturer's website www.vzpa.ru for more information about the table of acceptable substances.

All coupling elements except for the rubber seal are made of AISI 304 or AISI 321 stainless steel.

The coupling is manufactured according to the current technical documentation of the manufacturer TU 25.99.29-009-21203517-2017, certificate of conformity No. 0095728.

3. Field of use

The couplings can be used to connect pipes made of a variety of materials such as cast iron, wrought iron, steel, and asbestos cement.

Types of damages that can be repaired: longitudinal cracks, damage caused by welding, pipe fractures, needle holes. The couplings can also be used to connect pipes end-to-end.

The medium in the pipes to be repaired and connected: if you use an EPDM seal, it goes well with all water solutions of different qualities, air, solids, and chemicals. products; in the case of NBR seals, it goes well with water, natural gas, oil, gasoline, and other hydrocarbons.

4.Package set

Coupling assembly – 1 pc, product passport - 1 per lot

5.Product storage and transportation

Couplings are delivered pre-assembled and packed in corrugated cardboard boxes. Storage conditions of the product must comply with groups 1, 2 of GOST 15150-69. Use a covered vehicle during transportation and, if needed, additionally pack the product to avoid any significant deformation of the factory box and clamp body.

6.Installation instructions

Prior to installation, please make sure that you have selected the correct coupling, which matches the diameter of the pipes to be connected. Make sure that the gap between them is within the value indicated in the dimension table. Use a reinforcing insert, if necessary.

On the type 1 coupling, unscrew the bolts from the threaded rod and open the body of the coupling, and on the type 2 coupling, unscrew the bolts from the two threaded rods and divide the body into two parts. Open the rubber seal and put the coupling onto the pipe. On type 1 coupling, close the body, on type 2 coupling, connect both parts. Insert the bolts back into the threaded rods and tighten them by hand. Then tighten gradually switching between a simple and special torque wrench. Recommended torque must meet the standard of GOST 37.001.050-73. Once assembled, please test the leaking under the pressure of the installed coupling.

8.Disposal

Upon the expiration of the service period, the product can be disassembled into parts: stainless steel, rubber and sent for recycling, or you can dispose of in accordance with the procedure established at the enterprise where this product is used, drawn up in accordance with the Laws of the Russian Federation No. 96-FZ «On the Protection of Atmospheric Air", No. 89-FZ "On Production and Consumption Wastes", No. 52-FZ «On the sanitary and epidemiological well-being of the population", and other Russian and regional regulations, acts, rules, orders, etc., which implement these laws.

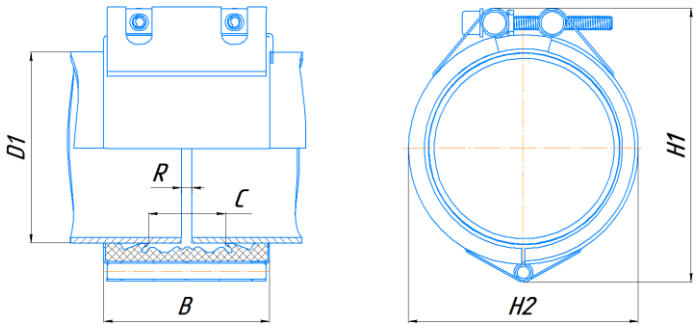
9. Manufacturer's warranty

The product that has been stored, installed, and operated according to this Product Passport has a 24-month warranty period from the date of its purchase. The expected service period is 10 years.

Manufacturer: "Volzhskiy Zavod Promyshlennoy Armatury" LLC, Samara region, Togliatti, Vokzalnaya str., 1a. tel. +7-987-430-22-11 (WhatsApp), www.vzpa.ru, info@vzpa.ru

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Dimension table. Pipe coupling (open, repair)



№	Pipe diameter* *** D1, mm	Diameter tolerance, mm		Pressure. MPa		B, mm	C, mm	H1, mm	H2, mm	Gap R, mm	
				PN **	PS*					without insert	with insert***
1	2	3	4	5	6	7	8	9	10	11	12
1	48,3	47,1	49,5	1,6	2,5	106	63	83	128	5	15
2	50,0	48,8	51,2	1,6	2,5	106	63	85	129	5	15
3	51,0	49,7	52,3	1,6	2,5	106	63	86	130	5	15
4	54,0	52,7	55,3	1,6	2,5	106	63	89	132	5	15
5	57,0	55,5	58,5	1,6	2,5	106	63	103	134	5	15
6	60,3	58,8	61,8	1,6	2,5	106	63	106	137	5	15
7	63,5	62,0	65,0	1,6	2,5	106	63	110	139	5	15
8	68,0	66,5	69,5	1,6	2,5	106	63	114	143	5	15
9	70,0	68,5	71,5	1,6	2,5	106	63	116	144	5	15
10	73,0	71,5	74,5	1,6	2,5	106	63	119	147	5	25
11	76,1	74,6	77,6	1,6	2,5	107	63	130	148	5	25
12	82,5	81,0	84,0	1,6	2,4	107	63	137	153	5	25
13	84,0	82,5	85,5	1,6	2,4	107	63	138	154	5	25
14	88,9	87,4	90,4	1,6	2,4	107	63	143	158	5	25
15	95,0	93,5	96,5	1,6	2,4	107	63	149	163	5	25
16	100,6	99,0	102,2	1,6	2,3	107	63	155	168	5	25
17	101,6	100,0	103,2	1,6	2,3	107	63	156	169	5	25
18	104,0	102,4	105,6	1,6	2,3	107	63	158	171	5	25
19	104,8	103,2	106,4	1,6	2,3	107	63	159	172	5	25
20	108,0	106,4	109,6	1,6	2,3	107	63	162	174	5	25
21	110,0	109,0	112,0	1,6	2,3	107	63	164	176	5	25
22	114,3	112,6	116,0	1,6	2,0	107	63	168	180	5	25
23	121,0	119,3	122,7	1,6	2,0	109	63	179	188	5	35
24	127,0	125,3	128,7	1,6	2,0	109	63	185	193	5	35
25	129,0	127,3	130,7	1,6	2,0	109	63	187	195	5	35
26	130,2	128,5	131,9	1,6	2,0	109	63	188	196	5	35
27	133,0	131,0	135,0	1,6	1,6	109	63	191	199	5	35
28	139,7	137,7	141,7	1,6	1,6	109	63	198	205	5	35
29	141,3	139,3	143,3	1,6	1,6	109	63	199	206	5	35
30	146,0	144,0	148,0	1,6	1,6	109	63	204	210	5	35
31	152,4	150,4	154,4	1,6	1,6	109	63	210	216	5	35
32	154,0	152,0	156,0	1,6	1,6	109	63	212	217	5	35
1	2	3	4	5	6	7	8	9	10	11	12

33	159,0	157,0	161,0	1,6	1,6	109	63	217	222	5	35
34	165,0	162,8	167,2	1,6	1,6	109	63	223	227	5	35
35	168,3	166,1	170,5	1,6	1,6	109	63	226	230	5	35
36	172,0	170,0	174,0	0,6	1,6	140	94	230	234	5	35
37	177,8	175,8	179,8	0,6	1,6	140	94	236	239	5	35
37	180,0	178,0	182,0	0,6	1,6	140	94	238	241	5	35
39	193,7	191,7	195,7	0,6	1,6	140	94	252	254	5	35
40	200,0	198,0	202,0	0,6	1,6	140	94	258	260	5	35
41	203,0	201,0	205,0	0,6	1,6	140	94	261	262	5	35
42	204,0	202,0	206,0	0,6	1,6	140	94	262	263	5	35
43	206,0	204,0	208,0	0,6	1,6	140	94	264	265	5	35
44	210,0	207,5	212,5	0,6	1,6	140	94	268	239	5	35
45	219,1	216,9	221,3	0,6	1,6	140	94	277	277	5	35
46	244,5	242,0	247,0	0,6	1,0	140	94	308	312	5	35
47	250,0	247,5	252,5	0,6	1,0	140	94	313	317	5	35
48	254,0	251,5	256,5	0,6	1,0	140	94	317	320	5	35
49	256,0	253,5	258,5	0,6	1,0	140	94	319	322	5	35
50	267,0	264,0	270,0	0,6	1,0	140	94	330	333	5	35
51	273,0	270,0	276,0	0,6	1,0	140	94	336	338	5	35
52	298,5	295,5	301,5	0,6	1,0	140	94	362	362	5	35
53	304,0	301,0	307,0	0,6	0,6	140	94	367	367	5	35
54	306,0	303,0	309,0	0,6	0,6	140	94	369	369	5	35
55	323,9	320,9	326,9	0,6	0,6	140	94	387	387	5	35
56	325,0	322,0	328,0	0,6	0,6	140	94	388	388	5	35
57	326,0	322,7	329,3	0,6	0,6	14	94	389	389	5	35
58	351,0	348,0	354,0	0,4	0,6	140	94	414	413	5	35
59	355,6	352,1	359,1	0,4	0,6	140	94	419	417	5	35
60	368,0	364,5	371,5	0,4	0,4	140	94	431	429	5	35
61	377,0	373,5	380,5	0,4	0,4	140	94	440	438	5	35
62	402,0	398,5	405,5	0,4	0,4	140	94	465	462	5	35
63	406,4	402,9	409,9	0,4	0,4	140	94	469	466	5	35
64	419,0	415,5	422,5	0,4	0,4	140	94	482	478	5	35
65	426,0	422,5	429,5	0,4	0,4	140	94	489	485	5	35
66	450,0	446,5	453,5	0,4	0,4	140	94	513	509	5	35
67	457,2	453,7	460,7	0,4	0,4	140	94	520	515	5	35
68	480,0	476,5	483,5	0,4	0,4	140	94	543	538	5	35
69	500,0	496,5	503,5	0,4	0,4	140	94	563	557	5	35
70	508,0	504,5	511,5	-	0,4	140	94	571	565	5	35
71	530,0	526,5	533,5	-	0,4	140	94	593	586	5	35
72	558,8	555,3	562,3	-	0,3	140	94	622	615	5	35
73	609,6	606,1	613,1	-	0,3	140	94	673	664	5	35

* PS - Indicates operating pressure. The test pressure is equal to D operational x 1.5.
** PN - Indicates operating pressure. The test pressure is equal to D operational x 4.
*** The reinforcing insert is supplied separately (if requested).
**** Custom size of other pipe diameter in the range from 48.3 to 609.6 mm is possible.