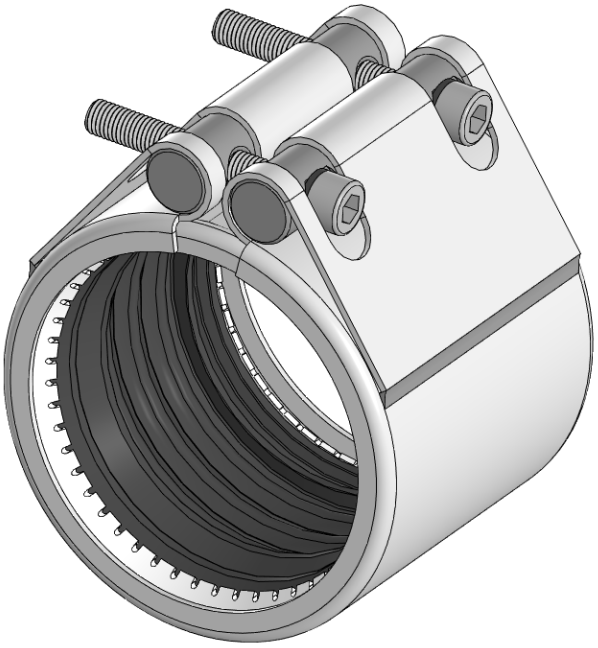
Volzhskiy Zavod
Promyshlennoy Armatury

Pipe coupling (GRIP)



PRODUCT PASSPORT

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

2022

Pipe coupling VZPA (GRIP)

1. General information

The pipe coupling is designed to connect pipelines with an operating pressure of up to 3,4 MPa and a diameter from 48.3 to 609.6 mm.

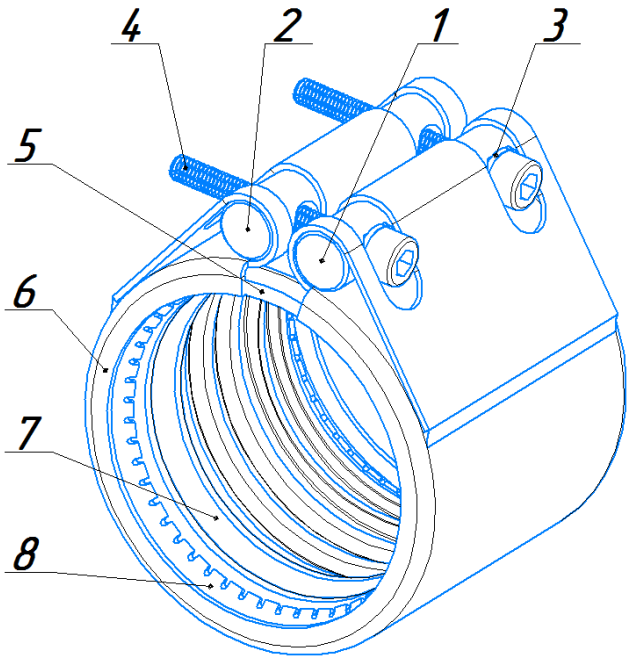
It is equipped with two special anchor rings, which penetrate into the pipe during the pressure increase. It provides additional anchoring of pipelines during axial load under pressure inside the pipes. No rigid pipe fixation is required.

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

2. Product components.

The pipe coupling consists of a body (6) with a bearing (5) welded to it, a clamping unit (lock), a rubber seal, and two anchor rings (8).

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



(Fig. 1).

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.

The medium in the pipes to be 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.

Clean and cling together the ends of the pipes to be connected. Pipes must be in line. Unscrew (but don’t remove) the bolts from the threaded rod as much as possible. Attach the coupling (coupling axis must go in line with the pipes) to the pipe junction so that it is in the center of the coupling. Make marks on the pipes using chalk (or a marker) according to the dimensions of the attached coupling. Disconnect the pipes. Put a coupling on one of them. Again, attach the pipes’ ends. Move the coupling along the axis of the pipes to be connected until it is fixed right at the marks.

Screw the bolts back into the threaded rods by hand first. Then tighten gradually switching between a simple or 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.

7.Disposal

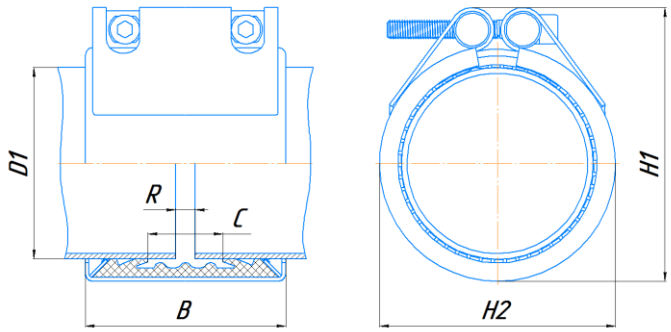
Upon the expiration of the service period, the product can be disassembled into parts: stainless steel, rubber and sent for recycling, or you can dispose of in accordance with the procedure established at the enterprise where this product is used, drawn up in accordance with the Laws of the Russian Federation 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.

8. 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

Dimension table. Pipe coupling (GRIP)



№	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	3,4	106	52	83	128	5-10	5-15
2	50,0	48,8	51,2	1,6	3,4	106	52	85	129	5-10	5-15
3	51,0	49,7	52,3	1,6	3,4	106	52	86	130	5-10	5-15
4	54,0	52,7	55,3	1,6	3,4	106	52	89	132	5-10	5-15
5	57,0	56,2	57,8	1,6	3,4	106	52	92	134	5-10	5-15
6	60,3	59,5	61,1	1,6	3,4	106	52	95	137	5-10	5-15
7	63,5	62,7	64,3	1,6	3,4	106	52	98	139	5-10	5-15
8	66,6	65,8	67,4	1,6	3,4	106	52	101	142	5-10	5-15
9	68,0	67,2	68,8	1,6	3,4	106	52	103	143	5-10	5-15
10	70,0	69,1	70,9	1,6	3,4	106	52	105	144	5-10	5-15
11	73,0	72,1	73,9	1,6	3,4	106	52	108	147	5-10	5-25
12	76,1	75,2	77,0	1,6	3,1	107	52	118	148	5-10	5-25
13	82,5	81,6	83,4	1,6	3,1	107	52	125	153	5-10	5-25
14	84,0	83,1	84,9	1,6	3,1	107	52	126	154	5-10	5-25
15	88,9	87,9	89,9	1,6	3,1	107	52	131	158	5-10	5-25
16	95,0	94,0	96,0	1,6	3,1	107	52	137	163	5-10	5-25
17	100,6	99,4	101,8	1,6	2,5	107	52	143	168	5-10	5-25
18	101,6	100,4	102,8	1,6	2,5	107	52	144	169	5-10	5-25
19	104,0	102,7	105,3	1,6	2,5	107	52	146	171	5-10	5-25
20	104,8	103,5	106,1	1,6	2,5	107	52	147	172	5-10	5-25
21	108,0	106,7	109,3	1,6	2,5	107	52	150	174	5-10	5-25
22	110,0	109,0	112,0	1,6	2,5	107	52	152	176	5-10	5-25
23	114,3	113,0	115,6	1,6	2,0	107	52	156	180	5-10	5-25
24	121,0	119,7	122,3	1,6	2,0	109	52	166	188	5-10	5-35
25	127,0	125,5	128,5	1,6	2,0	109	52	172	193	5-10	5-35
26	129,0	127,5	130,5	1,6	2,0	109	52	174	195	5-10	5-35
27	130,2	128,7	131,7	1,6	2,0	109	52	175	196	5-10	5-35
28	133,0	131,5	134,5	1,6	2,0	109	52	178	199	5-10	5-35
29	139,7	138,1	141,3	1,6	2,0	109	52	185	205	5-10	5-35
30	141,3	139,7	142,9	1,6	2,0	109	52	186	206	5-10	5-35
31	146,0	144,4	147,6	1,6	2,0	109	52	191	210	5-10	5-35

1	2	3	4	5	6	7	8	9	10	11	12
32	152,4	150,7	154,1	1,6	2,0	109	52	197	216	5-10	5-35
33	154,0	152,3	155,7	1,6	2,0	109	52	199	217	5-10	5-35
34	159,0	157,2	160,8	1,6	2,0	109	52	204	222	5-10	5-35
35	165,0	163,1	166,9	1,6	2,0	109	52	210	227	5-10	5-35
36	168,3	166,4	170,2	1,6	2,0	109	52	213	230	5-10	5-35
37	177,8	175,8	179,8	0,63	1,6	140	83	223	239	5-10	5-35
37	180,0	178,0	182,0	0,63	1,6	140	83	225	241	5-10	5-35
39	193,7	191,7	195,7	0,63	1,6	140	83	239	254	5-10	5-35
40	200,0	198,0	202,0	0,63	1,6	140	83	245	260	5-10	5-35
41	203,0	200,8	205,2	0,63	1,6	140	83	248	262	5-10	5-35
42	204,0	201,8	206,2	0,63	1,6	140	83	249	263	5-10	5-35
43	206,0	203,8	208,2	0,63	1,6	140	83	251	265	5-10	5-35
44	210,0	207,5	212,5	0,63	1,6	140	83	255	269	5-10	5-35
45	219,1	216,7	221,5	0,63	1,6	140	83	264	277	5-10	5-35
46	244,5	242,1	246,9	0,63	1,0	140	83	295	312	5-10	5-35
47	250,0	247,4	252,6	0,63	1,0	140	83	300	317	5-10	5-35
48	254,0	251,4	256,6	0,63	1,0	140	83	304	320	5-10	5-35
49	256,0	253,4	258,6	0,63	1,0	140	83	306	322	5-10	5-35
50	267,0	264,4	269,6	0,63	1,0	140	83	317	333	5-10	5-35
51	273,0	270,4	275,6	0,63	1,0	140	83	323	338	5-10	5-35
52	298,5	295,5	301,5	0,63	1,0	140	83	349	362	5-10	5-35
53	304,0	301,0	307,0	0,63	0,63	140	83	354	367	5-10	5-35
54	306,0	303,0	309,0	0,63	0,63	140	83	356	369	5-10	5-35
55	323,9	320,6	327,2	0,63	0,63	140	83	374	387	5-10	5-35
56	325,0	321,7	328,3	0,63	0,63	140	83	375	388	5-10	5-35
57	326,0	322,7	329,3	0,63	0,63	140	83	375	388	5-10	5-35
58	351,0	347,7	354,3	0,4	0,63	140	83	401	413	5-10	5-35
59	355,6	352,1	359,1	0,4	0,63	140	83	406	417	5-10	5-35
60	368,0	364,5	371,5	0,4	0,4	140	83	418	429	5-10	5-35
61	377,0	373,5	380,5	0,4	0,4	140	83	427	438	5-10	5-35
62	402,0	398,5	405,5	0,4	0,4	140	83	452	462	5-10	5-35
63	406,4	402,4	410,4	0,4	0,4	140	83	456	466	5-10	5-35
64	419,0	415,0	423,0	0,4	0,4	140	83	469	478	5-10	5-35
65	426,0	422,0	430,0	0,4	0,4	140	83	476	485	5-10	5-35
66	450,0	446,0	454,0	0,4	0,4	140	83	500	509	5-10	5-35
67	457,2	452,7	461,7	0,4	0,4	140	83	507	515	5-10	5-35
68	480,0	475,5	484,5	0,4	0,4	140	83	530	538	5-10	5-35
69	500,0	495,5	504,5	0,4	0,4	140	83	550	557	5-10	5-35
70	508,0	503,5	512,5	-	0,4	140	83	558	565	5-10	5-35
71	530,0	525,5	534,5	-	0,4	140	83	580	586	5-10	5-35
72	558,8	554,3	563,3	-	0,25	140	83	609	615	5-10	5-35
73	609,6	605,1	614,1	-	0,25	140	83	660	664	5-10	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.