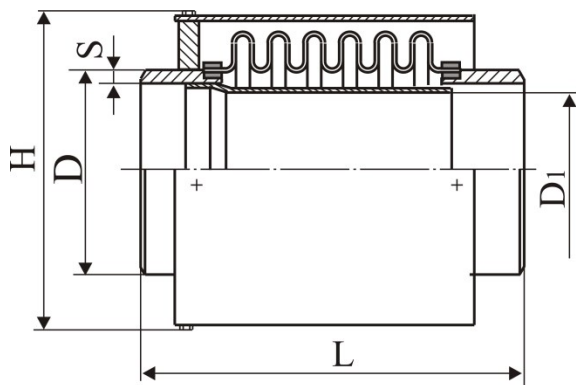


Axial expansion joints, HOIM type



HOIM type

HOIM type axial expansion joints with a fixed casing mounted on one of the expansion joint's branch pipes using weldolets and with an internal guide branch pipe. They can be installed directly in pipelines transferring water with a temperature up to 150 °C and at a velocity above 8 m/s, oil and oil products with a temperature up to 450 °C and at a velocity above 8 m/s, as well as steam and gaseous media not causing corrosion to the expansion joint material, with a temperature up to 500 °C and at a velocity of 20 to 80 m/s.

Table 4*

Serial product range**

Reference designation	Nominal pressure, PN, MPa (kgf/cm ²)	Nominal diameter, DN, mm	Dimensions, mm				Weight, kg
			D	S	H	L	
HOIM-2.5-65	0.25 (2.5)	65	76	3.5	196	340	5
HOIM-2.5-80		80	89	3.5	209	348	5
HOIM-2.5-100		100	108	4.0	233	358	6
HOIM-2.5-125		125	133	4.0	265	372	7
HOIM-2.5-150		150	159	4.5	307	384	9
HOIM-2.5-200		200	219	6.0	367	410	13
HOIM-2.5-250		250	273	7.0	425	588	19
HOIM-2.5-300		300	325	7.0	481	606	24
HOIM-2.5-350		350	377	7.0	541	612	34
HOIM-2.5-400		400	426	7.0	594	622	31
HOIM-2.5-500		500	530	8.0	700	626	38
HOIM-2.5-600		600	630	8.0	806	658	47
HOIM-2.5-700		700	720	8.0	912	634	52
HOIM-2.5-800		800	820	8.0	1016	668	72
HOIM-2.5-900	900	920	10.0	1120	650	76	
HOIM-2.5-1000	1000	1020	10.0	1224	664	99	
HOIM-2.5-1200	1200	1220	12.0	1432	664	117	
HOIM-2.5-1400	1400	1420	14.0	1632	664	137	
HOIM-6.3-65	0.63 (6.3)	65	76	3.5	196	346	5
HOIM-6.3-80		80	89	3.5	209	358	6
HOIM-6.3-100		100	108	4.0	233	376	7
HOIM-6.3-125		125	133	4.0	265	396	9
HOIM-6.3-150		150	159	4.5	307	412	13
HOIM-6.3-200		200	219	6.0	367	432	17
HOIM-6.3-250		250	273	7.0	425	588	19
HOIM-6.3-300		300	325	7.0	481	606	24
HOIM-6.3-350		350	377	7.0	541	602	30
HOIM-6.3-400		400	426	7.0	594	632	34
HOIM-6.3-500		500	530	8.0	710	644	48
HOIM-6.3-600		600	630	8.0	810	678	61
HOIM-6.3-700		700	720	8.0	912	660	76
HOIM-6.3-800		800	820	8.0	1016	694	102
HOIM-6.3-900	900	920	10.0	1120	674	107	
HOIM-6.3-1000	1000	1020	10.0	1224	694	147	
HOIM-6.3-1200	1200	1220	12.0	1432	694	174	
HOIM-6.3-1400	1400	1420	14.0	1632	694	204	
HOIM-10-65	1.0 (10)	65	76	3.5	196	358	5
HOIM-10-80		80	89	3.5	209	364	6
HOIM-10-100		100	108	4.0	233	386	8
HOIM-10-125		125	133	4.0	265	406	11
HOIM-10-150		150	159	4.5	307	396	11
HOIM-10-200		200	219	6.0	367	416	14
HOIM-10-250		250	273	7.0	425	600	23
HOIM-10-300		300	325	7.0	481	616	27
HOIM-10-350		350	377	7.0	541	620	36
HOIM-10-400		400	426	7.0	594	654	44
HOIM-10-500		500	530	8.0	714	676	66
HOIM-10-600		600	630	8.0	810	706	84
HOIM-10-700		700	720	8.0	912	678	92
HOIM-10-800		800	820	8.0	1016	712	123
HOIM-10-900	900	920	10.0	1120	698	139	
HOIM-10-1000	1000	1020	10.0	1224	716	184	
HOIM-10-1200	1200	1220	12.0	1342	716	219	
HOIM-10-1400	1400	1420	14.0	1632	716	259	

* The parameters of expansion joints given in the Table are for reference only; for precise product performance please contact the factory's technical specialists;

** The scientific, material and technical facilities, as well as testing equipment of the factory make it possible to supply both serial products and customized products (designed and manufactured according to the customer's ToR).

HOIM type

HOIM type axial expansion joints with a fixed casing mounted on one of the expansion joint's branch pipes using weldolets and with an internal guide branch pipe. They can be installed directly in pipelines transferring water with a temperature up to 150 °C and at a velocity above 8 m/s, oil and oil products with a temperature up to 450 °C and at a velocity above 8 m/s, as well as steam and gaseous media not causing corrosion to the expansion joint material, with a temperature up to 500 °C and at a velocity of 20 to 80 m/s.

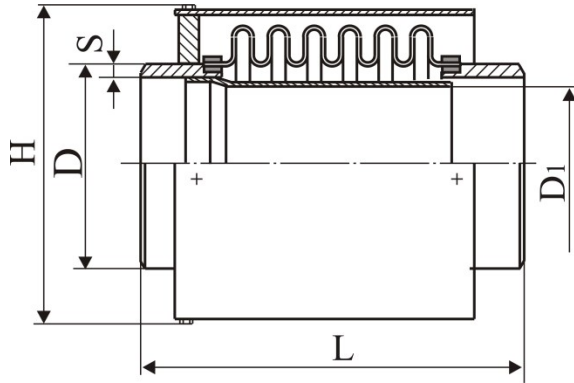


Table 4* continued

Serial product range**

Reference designation	Nominal pressure, PN, MPa (kgf/cm ²)	Nominal diameter, DN, mm	Dimensions, mm				Weight, kg
			D	S	H	L	
HOIM-16-65	1.6 (16)	65	76	3.5	196	374	6
HOIM-16-80		80	89	3.5	209	382	7
HOIM-16-100		100	108	4.0	233	376	7
HOIM-16-125		125	133	4.0	265	390	9
HOIM-16-150		150	159	4.5	307	406	12
HOIM-16-200		200	219	6.0	387	502	17
HOIM-16-250		250	273	7.0	425	632	27
HOIM-16-300		300	325	7.0	481	632	32
HOIM-16-350		350	377	7.0	541	640	44
HOIM-16-400		400	426	7.0	602	682	56
HOIM-16-500		500	530	8.0	718	702	85
HOIM-16-600		600	630	8.0	818	748	115
HOIM-16-700		700	720	8.0	912	712	125
HOIM-16-800		800	820	8.0	1024	754	174
HOIM-16-900		900	920	10.0	1124	734	194
HOIM-16-1000		1000	1020	10.0	1228	748	235
HOIM-16-1200	1200	1220	12.0	1342	748	281	
HOIM-16-1400	1400	1420	14.0	1632	748	332	
HOIM-25-65	2.5 (25)	65	76	4.0	196	358	6
HOIM-25-80		80	89	4.0	209	364	6
HOIM-25-100		100	108	4.0	233	384	8
HOIM-25-125		125	133	4.0	265	398	10
HOIM-25-150		150	159	4.5	327	512	13
HOIM-25-200		200	219	6.0	391	514	19
HOIM-25-250		250	273	7.0	425	632	27
HOIM-25-300		300	325	8.0	481	642	35
HOIM-25-350		350	377	9.0	541	648	47
HOIM-25-400		400	426	9.0	606	702	66
HOIM-25-500		500	530	8.0	722	722	98
HOIM-25-600		600	630	8.0	822	766	131
HOIM-25-700		700	720	8.0	912	736	151
HOIM-25-800		800	820	8.0	1028	780	209
HOIM-25-900		900	920	10.0	1128	748	215
HOIM-25-1000		1000	1020	10.0	1232	776	288
HOIM-25-1200	1200	1220	14.0	1432	776	343	
HOIM-25-1400	1400	1420	14.0	1632	776	406	

* The parameters of expansion joints given in the Table are for reference only; for precise product performance please contact the factory's technical specialists;

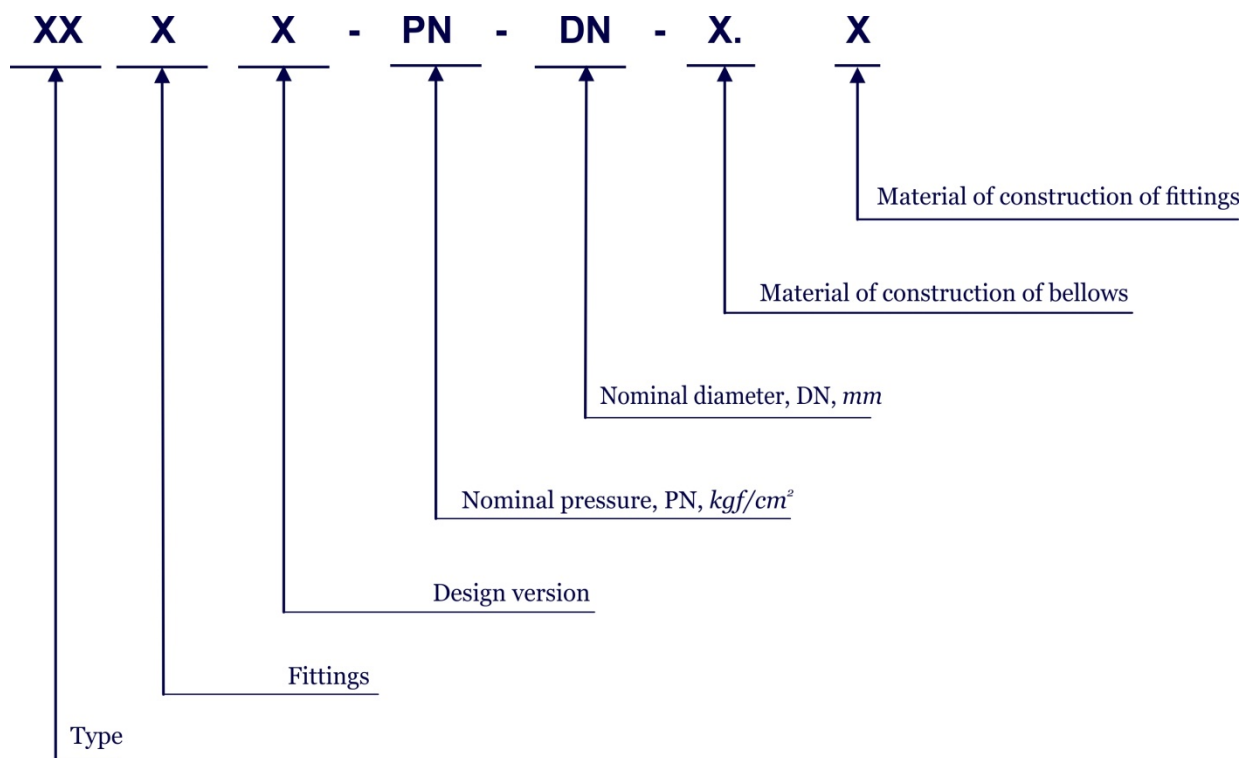
** The scientific, material and technical facilities, as well as testing equipment of the factory make it possible to supply both serial products and customized products (designed and manufactured according to the customer's ToR).

Reference designation of unbalanced general purpose industrial grade axial expansion joints as per the ИРНС.300260.052ТУ specification

The reference designation of expansion joints consists of symbols and values of the main parameters:

Reference designation of expansion joint types and versions					
Type	Symbol	Fitting	Symbol	Design version	Symbol
Axial	HO	Weld branch pipe (on both sides)	Π	Basic (bellows + 2 branch pipes or flanges)	H
		Butt welded plate flange (on both sides)	Φ	With a guide branch pipe	Γ
		Plate flange (on both sides)	B	Enclosed	K
				With a guide branch pipe and enclosed	M

Expansion joint reference designation diagram



Depending on the operating conditions, the material of construction of expansion joints shall be specified at order placement in accordance with the tables below:

Bellows		
Material of construction	Material grade	Permissible operating temperature, K (°C)
1	Steel 08X18H10T (12X18H10T) as per GOST 5632	20 to 773 (-253 to 500)
2	Steel 10X17H13M2T as per GOST 5632	20 to 773 (-253 to 500)

Fittings		
Material of construction	Material grade	Permissible operating temperature, K (°C)
1	Steel 20 as per GOST 1050	253 to 698 (-20 to 425)
2	Steel 17ГC, 17Г1C as per GOST 19281	233 to 748 (-40 to 475)
3	Steel 09Г2C, 09Г2 as per GOST 19281	213 to 748 (-60 to 475)
4	Steel 08X18H10T, 12X18H10T as per GOST 5632	20 to 823 (-253 to 550)
5	Steel 10X17H13M2T as per GOST 5632	20 to 823 (-253 to 550)
6	Steel 12MX, 12X1MΦ as per GOST 20072	223 to 773 (-50 to 500)

Also, depending on the operating conditions of expansion joints, a heat-resistant corrosion-protection and waterproof coating can be applied onto outer surfaces of bellows and fittings.

Example of ordering information for:

1. An axial expansion joint for welded attachment to a pipeline made of 12X18H10T steel; nominal pressure, PN, 1.6 MPa (16 kgf/cm²); nominal diameter, DN, 250 mm; mounted casing; material of bellows construction, 08X18H10T steel as per GOST 5632; material of construction of fittings, 12X18H10T steel as per GOST 5632: “Expansion joint **НОПК-16-250-1.4** as per ИЯНШ.300260.052 ТУ”.

2. An axial expansion joint for flanged attachment to a pipeline made of grade 20 steel; nominal pressure, PN, 2.5 MPa (25 kgf/cm²); nominal diameter, DN, 250 mm; mounted casing and guide branch pipe; material of bellows construction, 08X18H10T steel as per GOST 5632; material of construction of fittings, grade 20 steel as per GOST 1050: “Expansion joint **НОФМ-16-250-1.1** as per ИЯНШ.300260.052 ТУ”.

Basic parameters and characteristics of handled media of the products as per ИЯНШ.300260.052 ТУ

Handled media	Handled medium temperature, K (°C)	Handled medium velocity, m/s	
		Without a guide branch pipe	With a guide branch pipe
Oil, oil products	723 (450)	up to 8	over 8
Fresh water	423 (150)		
Steam, natural gas, gaseous media not causing corrosion to expansion joint material	773 (500)	up to 20	above 20 to 80
Note:	<ol style="list-style-type: none"> The permissible content of chloride ions in fresh water, the handled medium for expansion joints to be installed in heating networks, shall not exceed 250 mg/l. The expansion joints may be used for other handled media not capable of causing sulphide stress corrosion cracking. The data provided in the table do not cover the expansion joints, dwg. ИЯНШ.302667.700-01.61, ИЯНШ.302667.701-01.61, ИЯНШ.302667.732-01.41. 		