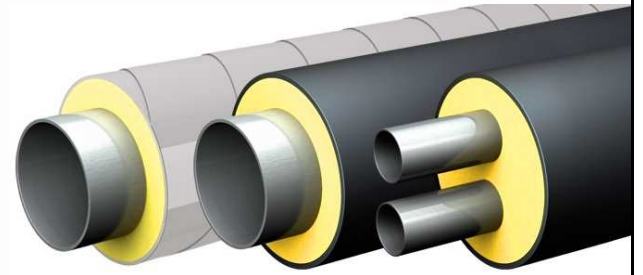


izoterms



Pre-insulated pipes systems

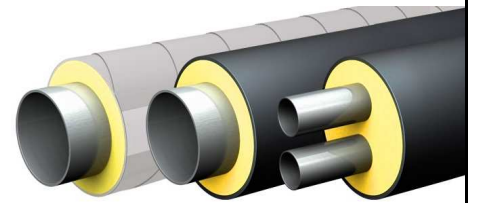
IZOTERMS

Catalogue

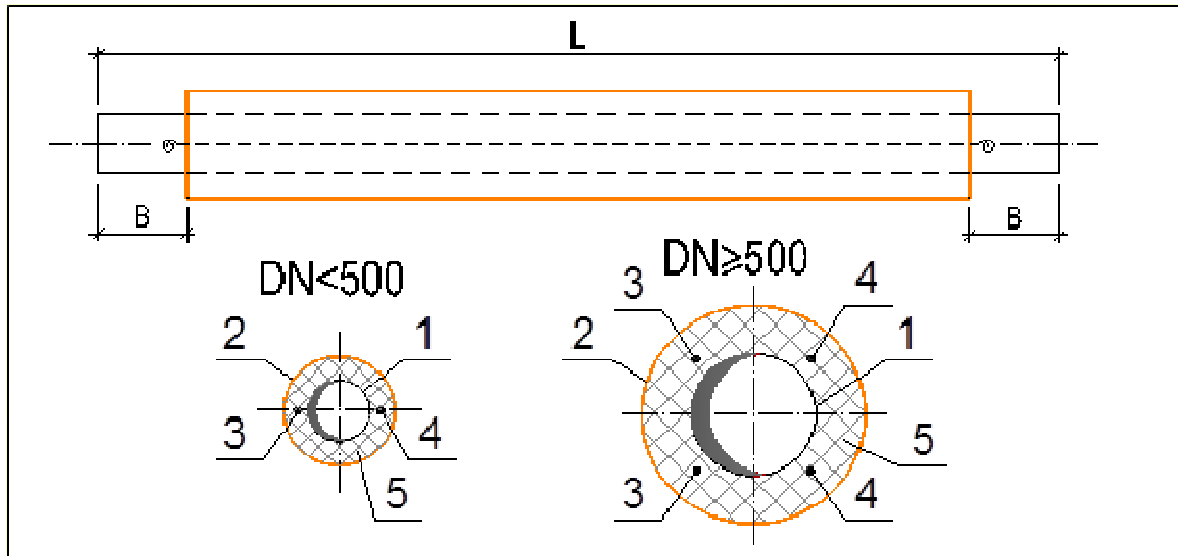
Part 1

Single straight pipes





Insulated pipes (single-layer insulation)



Insulated pipe include:

- 1 - Steel pipe;
- 2 - Casing pipe with casing stabbing kit;
- 3 - Cooper control wire;
- 4 - Tinned cooper control wire;
- 5 - Polyurethane foam insulation.

All elements connected to single structure with polyurethane foam (thermal insulation) factory mounting.

Working tube diameter, wall thickness and steel grade are determine by design or order. In case of data absence the pipe wall thickness and steel grade according to EN 253 or GOST 30732 - Article 20 are accepted.

Pipe length $L = 12\text{m} \pm 50\text{mm}$, by request from $0,8\text{m}$ till max $16\text{m} \pm 50\text{mm}$.

The case diameter (thermal insulation thickness) are determine by design, order.

For underground laying PE pipe is used.

For aboveground laying a zinc cover spiral pipe or polyethylene pipe PE-80 are used.

For aboveground pipelining "Izoterm" supports and supporting structures are proposed.

Non-insulated pipe ends size (B):

- for $DN \leq 125$ - $150 \pm 15\text{mm}$;
- for $DN \geq 125$ - $200 \pm 20\text{mm}$;

During manufacture a copper and tinned copper control wires with a cross-section of 1.5mm^2 are install:

For $DN \leq 500$ - 2 wires,

For $DN \geq 500$ - 4 wires.

Control wires used for thermal insulation control according Nordik system.

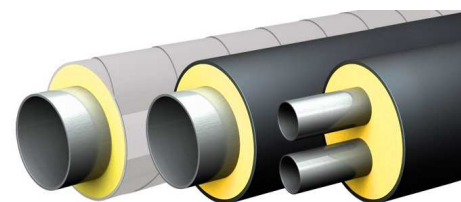
Different number of control wires and their placement are determine by design or order according the Brandes system.

Thermal insulation is single-layer, made from polyurethane foam.

Thermal conductivity of polyurethane foam specify manufacturer.

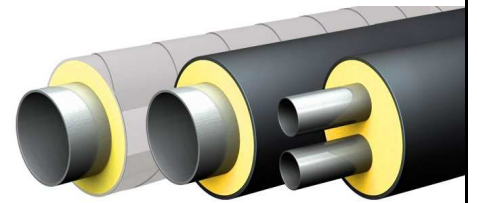
For 2017 - $\lambda = 0.0257\text{ W} / \text{m} \cdot ^\circ\text{K}$.

Thermally insulated pipes are make for a specific design, order.



Produced single-layer insulated pipes table

Steel pipes		Polyethylene case			Zinc cover case		Standard
DN	Ø D _s x b min mm	Series 1	Series 2	Series 3	Series 1	Series 2	
		Ø D _p x b mm	Ø D _p x b mm	Ø D _p x b mm	Ø D x b mm	Ø D x b mm	
15	21,3x2	90	110	125	100x0,5	125x0,5	EN/RUS
20	26,9x2	90	110	125	100x0,5	125x0,5	EN/RUS
25	32x3	90	110	125	100x0,5	125x0,5	RUS
25	33,7x2,3	90	110	125	100x0,5	125x0,5	EN/RUS
32	38x3	110x3	125x3	140x3	125x0,5	125x0,5	RUS
32	42,4x2,6	110x3	125x3	140x3	125x0,5	125x0,5	EN/RUS
40	45x3	110x3	125x3	140x3	125x0,5	125x0,5	RUS
40	48,3x2,6	110x3	125x3	140x3	125x0,5	140x0,5	EN
50	57x3	125x3	140x3	160x3	125x0,5	160x0,5	RUS
50	60,3x2,9	125x3	140x3	160x3	125x0,5	160x0,5	EN
65	76x3	140x3	160x3	180x3	160x0,5	200x0,5	RUS
65	76,1x2,9	140x3	160x3	180x3	160x0,6	200x0,5	EN
80	88,9x3,2	160x3	180x3,2	200x3,2	160x0,5	200x0,5	EN
80	89x4	160x3	180x3,2	200x3,2	160x0,5	200x0,5	RUS
100	108x4	200x3,2	225x3,4	250x3,6	200x0,5	225x0,5	RUS
100	114,3x3,6	200x3,2	225x3,4	250x3,6	200x0,5	225x0,5	EN
125	133x4	225x3,4	250x3,6	280x3,9	225x0,5	250x0,5	RUS
125	139,7x3,6	225x3,4	250x3,6	280x3,9	225x0,5	250x0,5	EN
150	159x4,5	250x3,6	280x3,9	315x4,1	280x0,5	315x0,5	RUS
150	168,3x4	250x3,6	280x3,9	315x4,1	280x0,5	315x0,5	EN
200	219x6	315x4,1	355x4,5	400x4,8	315x0,7	355x0,7	RUS
200	219,1x4,5	315x4,1	355x4,5	400x4,8	315x0,7	355x0,7	EN
250	273x5; x7	400x4,8	450x5,2	500x5,6	400x0,7	450x0,7	EN/RUS
300	323,9x5,6	450x5,2	500x5,6	560x6	500x0,9	560x0,9	EN
300	325x7	450x5,2	500x5,6	560x6	500x0,9	560x0,9	RUS
350	355,6x5,6	500x5,6	560x6	630x6,6	560x0,9	630x0,9	EN
350	377x6	500x5,6	560x6	630x6,6	560x0,9	630x0,9	RUS
400	406,4x6,3	560x6	630x6,6	710x7,2	560x0,9	630x0,9	EN
400	426x7	560x6	630x6,6	710x7,2	560x0,9	630x0,9	RUS
450	457x6,3	560x6	630x6,6	710x7,2	560x0,9	630x0,9	EN
500	508x6,3	630x6,6	710x7,2	800x7,9	630x0,9	710x0,9	EN
500	530x7	630x6,6	710x7,2	800x7,9	630x0,9	710x0,9	RUS
600	610x7,1	710x7,2	800x7,9	900x8,7	800x0,9	900x0,9	EN
600	630x8	710x7,2	800x7,9	900x8,7	800x0,9	900x0,9	RUS
700	711x8	800x7,9	900x8,7	1000x9,4	900x0,9	1000x0,9	EN
700	720x8	800x7,9	900x8,7	1000x9,4	900x0,9	1000x0,9	RUS
800	813x8,8	900x8,7	1000x9,4	1100x10,2	1000x0,9	1100x0,9	EN
800	820x9	900x8,7	1000x9,4	1100x10,2	1000x0,9	1100x0,9	RUS
900	914x10	1000x9,4	1100x10,2	1200x11	1100x0,9	1200x0,9	EN
900	920x10	1000x9,4	1100x10,2	1200x11	1100x0,9	1200x0,9	RUS
1000	1016x11	1100x10,2	1200x11		1200x0,9	1400x0,9	EN
1000	1020x11	1100x10,2	1200x11		1200x0,9	1400x0,9	RUS



Notes:

Zinc cover case diameter (insulation thickness) to determine by calculation during design. During ordering process, the zinc cover dimensions may differ from table data.

Information for designers:

- Production is oriented to specific design and orders;
- Please, fill out specifications with maximum information value - see recommendations.

Information for customers:

- Production focused at the operational execution of orders;
- For application submitting, please, see the recommendations for orders texts;
- Pipes production time and delivery by agreed schedule.

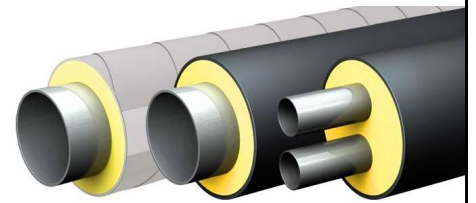
Information for installers:

- It is possible to cut pipes to required size;
- Pipes production time and delivery by agreed schedule.

Recommendation for design specifications, orders filling.

Recommended text example	What will be manufactured and received by customer
1. Insulated pipe Ø60/140	It made from an electrically welded pipe 60.3 x 2.9 mm, steel grade P235TR1 or P235TR2 according to EN10217-1 or steel P235GH according to EN10217-2, in a PE case Ø140 with polyurethane thermal insulation, with 2-control wires horizontal arrangement, with a non-insulated pipes ends length 150 ± 15 mm for butt weld prepared. Mounting position - horizontal.
2. Insulated pipe Ø60/140, P265GH	The same made from an electrically welded pipe 60.3 x 2.9 mm, steel grade P265GH according to EN10217-2.





Recommended text example	What will be manufactured and received by customer
3. Insulated pipe Ø60x4/180, EN10216-2	It made from seamless pipe 60.3 x 4 mm, steel grade P235GH according to EN10216-2 in PE case Ø180 with polyurethane foam insulation, with 2 control wires horizontal arrangement, with a non-insulated pipes ends length 150 ± 15 mm for butt weld prepared. Mounting position - horizontal.
4. Insulated pipe Ø60x4/160 in zinc covered case	It made from an electrically welded pipe 60.3 x 4 mm, steel grade P235GH according to EN10217-2 in spiral zinc covered pipe case Ø160 with polyurethane thermal insulation, with 2-control wires horizontal arrangement, with a non-insulated pipes ends length 150 ± 15 mm for butt weld prepared. Mounting position - horizontal.
5. Insulated pipe Ø60x4/160 in zinc covered case without control wires	The same without control wires.
6. Insulated pipe Ø610/800	It made from electrically welded pipe 610 x 7,1 mm, steel grade P235GH according to EN10217-5 in PE case Ø800 with polyurethane thermal insulation, with 4 control wires horizontal arrangement, with a non-insulated pipes ends length 200 ± 20 mm for butt weld prepared. Mounting position - horizontal.

