

# ENCLOSURES AND PROTECTIVE SUNSHADES RIZURBOX





Since 2005 OOO «NPO RIZUR» has a series production of enclosures and protective sunshades RizurBox made of metal or glass-reinforced plastic.

Due to the operational resources, we can conduct the whole range of actions on the engineering, manufacturing, and realization of enclosures and protective sunshades. Each working stage is controlled by the quality division of NPO RIZUR.

Product design developments are constantly being improved.

RizurBox are multifunctional enclosures and protective

sunshades used at different industrial facilities under various climatic conditions for equipment protection against adverse impacts: atmospheric or industrial. Average service life of RizurBox enclosure – more than 15 years, protective sunshade – more than 10 years.

Glass-reinforced and metal enclosures RizurBox are versatile in their applications and have all the necessary documents and permissions for operation even in hazardous areas. OOO «NPO RIZUR» manufactures enclosures of different dimensions, including multiple-door glass-reinforced and metal enclosures. The unit can be supplied with floor stands or other mounting elements manufactured by NPO RIZUR in accordance with the Customer's requirements or attached drawings.

In accordance with the requirements, it's possible to supply the enclosures together with the heaters, including explosion-proof ones, thermoregulators or a heating cable.

Soft enclosures RIZUR are manufactured in accordance with the requirements of regulatory documents, developed in the Company, have all the necessary certificates, and comply with the international standard ISO9001.



**If you have any questions about this type of equipment, you can contact the lead specialists of the «NPO RIZUR» Sales Department.**



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# Reinforced fiberglass enclosures

## RizurBox-C

### Intended use and application area

RizurBox-C reinforced fiberglass enclosures (thermoboxes) are manufactured according to Technical regulations TU-3442-001-12189681-2014 and are designed for the placement of control and measuring equipment, as well as telecommunication equipment (pressure sensors, flow meters, water gauges, network devices, check valves, etc.) both in outdoor and indoor facilities. RizurBox-C are weather-resistant enclosures designed to protect equipment against low temperatures, condensation, precipitation, dust, chemicals, physical damage, unauthorized access, theft, etc.

RizurBox-C reinforced fiberglass enclosures are designed to be used in indoor and outdoor areas exposed to explosion hazards in accordance with specified requirements, relevant industrial safety guidelines, and the manufacturer's recommendations.

All enclosures are made from inflammable materials and have all the necessary certification.



■ We can manufacture enclosures of any size and design upon the customer's request.

### Design description

RIZURBOX-C fiberglass enclosures have a multilayer structure of the body made from inflammable unsaturated polyester resin and glass-reinforced materials. The housing is antistatic.

The outer and inner covers of enclosures are separated by a heat-insulation layer made of polyurethane foam. The K FLEX ALU additional heat-insulation layer can be applied on request.

There are several types of enclosures:

- diagonally opening enclosures
- classical enclosures with one-door opening
- classical enclosures with two-sided opening
- horizontally/vertically-split enclosures
- modular enclosures

Thanks to our production facilities, we're able to manufacture enclosures of any type and size.

## Technical specifications

Installation area	General industrial areas Areas exposed to explosion hazards V-1a and V-1d, acc. to Electrical installation code (PUE), Ch. 7.3
Ingress protection	IP54 acc.to GOST 14254-96 IP65 acc.to GOST 14254-96 (on request) IP66 acc.to GOST 14254-96 (on request)
Ambient temperature	-60 ... +70 °C -70 ... +70 °C (with K FLEX ALU additional heat-insulation layer)
Resistivity	To oil products To chemical environments To ultraviolet radiation
Wall thickness	20-40 mm (depending on the design variant)
Fiberglass thickness	2-4 mm (depending on the design variant)
Thermal conductivity	0,03 W/m·K
Fitting materials (locks, hinges)	Stainless steel
Surface resistance (antistatic)	Under 10 <sup>9</sup> Ohm

<b>Explosion-proof marking</b>	
• with electrical heating (explosion-proof heater, heating section)	II Gb II C T6...T3 Gb X 1Ex e mb IIC T6...T3 Gb X 1Ex e d IIC T6...T3 Gb X 1Ex e d mb IIC T6...T3 Gb X 1Ex e IIC T6...T3 Gb X (depending on the design variant of the heater and thermoregulator used)
• water/steam heating is under 195 °C	II Gb IIC T3 X or II Gb IIB T3 X
• water/steam heating is under 130 °C	II Gb IIC T4 X or II Gb IIB T4 X
• water/steam heating is under 95 °C	II Gb IIC T5 X or II Gb IIB T5 X
• water/steam heating is under 80 °C	II Gb IIC T6 X or II Gb IIB T6 X
• without heating	II Gb IIC or II Gb IIB
<b>Colour</b>	RAL 7035, light grey any color (on request)
<b>Warranty period</b>	12 months 24/36 months (on request)
<b>Average operation time</b>	Over 15 years

## Enclosure delivery options

### Basic set

The Basic set includes an enclosure and all separately supplied components: mounting elements for equipment installation, mounting elements for enclosure installation, tube heat exchanger (water/steam), electric heater/heating section, temperature control device, signaling system, lamp, junction box, cable and tube glands, blind flanges, junctions, bolts, washers, nuts, etc.

The Basic set includes everything needed for the installation which is performed by the customer or an installation crew.



### Standard set

The Standard set is identical to the Basic set. However, the heaters and the inside fastening elements are installed in accordance with the Customer's technical drawings.

The installation of the enclosure as well as the monitoring and measuring equipment, is performed by the Customer or by an installation crew.



### System Set

The System set is almost identical to the Standard set. However, it also includes connecting, shut-off and control equipment (fittings, valves, impulse tubes, pre-insulated tube bundles RizurPak, valve device assemblies, etc.).

The System set includes several types of equipment (enclosures, soft enclosures, insulated impulse tubes, and equipment from third parties).

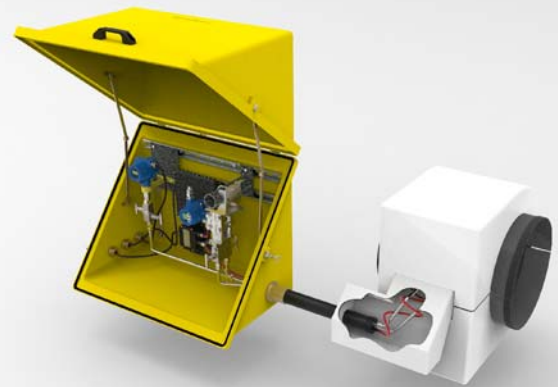
Installation of the enclosure as well as monitoring and measuring equipment is performed by the Customer or by an installation crew.



## Complete set

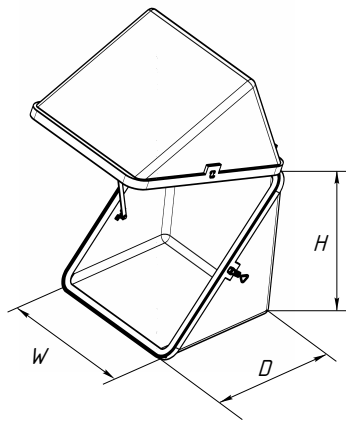
The Complete set is a fully assembled and ready-for-connection unit with installed monitoring and measuring equipment. The monitoring and measuring equipment is chosen by the Customer:

- the equipment can be preselected by our engineers in accordance with the customer's requirements
- the equipment can be specified by the Customer
- the equipment can be selected and supplied by the Customer.



## Standard variants of RizurBox-C enclosures

### Diagonally opening enclosures



Design variant	Dimensions for reference HxWxD*, mm
RizurBox-C-2	365x360x385
RizurBox-C-4	490x460x390
RizurBox-C-5	490x585x390
RizurBox-C-6	510x470x420
RizurBox-C-7	610x470x470
RizurBox-C-7,5	650x700x550
RizurBox-C-8	610x840x470
RizurBox-C-9	660x1010x470
RizurBox-C-10	680x680x680
RizurBox-C-11	750x595x680
RizurBox-C-12	650x970x560
RizurBox-C-13	570x750x600
RizurBox-C-16	760x860x760

\* The sizes of enclosures are for reference. To get the drawings with precise dimensional and internal specifications of enclosures, please contact RIZUR engineering department, +7 (4912) 20-20-80, marketing@rizur.ru

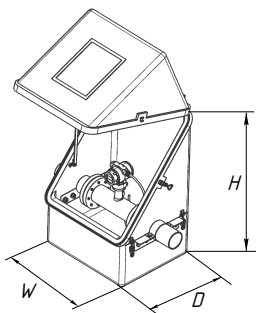


Reinforced fiberglass enclosure  
RizurBox-C-9 with floor-stands



Reinforced fiberglass enclosure  
RizurBox-C-7 with mounting clips

## Diagonally opening enclosures with a tray



Design variant	Dimensions for reference HxWxD*, mm
RizurBox-C-T7	820x470x470
RizurBox-C-T8	820x840x470
RizurBox-C-T12	800x970x640
RizurBox-C-T13	940x540x540
RizurBox-C-T14	850x390x380
RizurBox-C-T15	1090x390x390
RizurBox-C-T16	900x820x440

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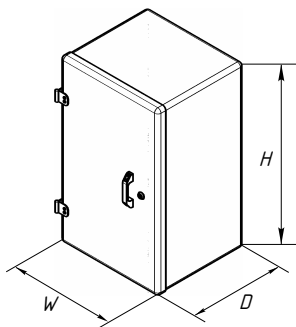


Reinforced fiberglass enclosure  
RizurBox-C-T7 with on-pipe fastening



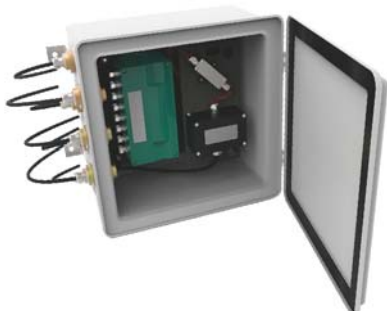
Reinforced fiberglass enclosure  
RizurBox-C-T8 with on-pipe fastening

## Enclosures with classical opening



Design variant	Dimensions for reference HxWxD*, mm
RizurBox-C-W1	600x400x350
RizurBox-C-W2	1000x600x500
RizurBox-C-W3	1000x600x350
RizurBox-C-W4	1000x1000x400
RizurBox-C-W5	500x470x300
RizurBox-C-W6	850x530x350
RizurBox-C-W7	400x400x250
RizurBox-C-W8	1090x890x480
RizurBox-C-W9	1000x800x500

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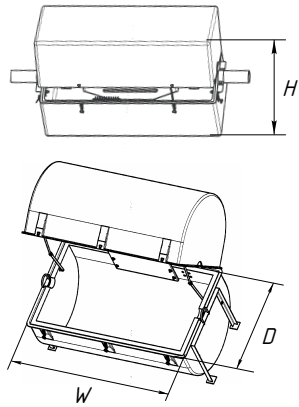
Reinforced fiberglass enclosure  
with classical opening RizurBox-C-W7



Reinforced fiberglass enclosure  
with classical opening RizurBox-C-W2

## Enclosures of CASE type

Design variant**	Dimensions for reference HxWxD*, mm
RizurBox-C-B-M	780x1300x510
RizurBox-C-B2-M	750x1210x760
RizurBox-C-B2-B	900x1210x760
RizurBox-C-B2-H	900x1210x760
RizurBox-C-B2-L	1100x1210x760
RizurBox-C-B2-Lm	1080x1290x780
RizurBox-C-B3-M	750x920x760
RizurBox-C-B3-B	900x920x760
RizurBox-C-B3-H	900x920x760
RizurBox-C-B3-L	1100x920x760
RizurBox-C-B4-B	900x1520x760
RizurBox-C-B4-L	1100x1520x760
RizurBox-C-B4-M	750x1520x760
RizurBox-C-B5-B	640x890x490



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\*\* The letters L and M in the names of various models of enclosures signify that the upper part is equal to the lower part.

The letter B is used if the upper part of the enclosure is larger than the lower one. The letter H shows that the lower part of the enclosure is larger than the upper one.



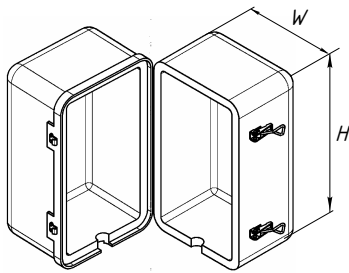
Reinforced fiberglass enclosure  
RizurBox-C-B3 with on-pipe  
fastening



Reinforced fiberglass enclosure  
RizurBox-C-B4 with floor-stands

## Enclosures of MULTI type

Design variant	Dimensions for reference HxWxD*, mm
RizurBox-C-M1	420x250x350
RizurBox-C-M2	680x480x350
RizurBox-C-M3	760x560x560
RizurBox-C-M4	500x500x500
RizurBox-C-M5	610x450x400
RizurBox-C-M6	680x480x450
RizurBox-C-M7	350x440x420
RizurBox-C-M9	385x265x200
RizurBox-C-M10	380x430x430



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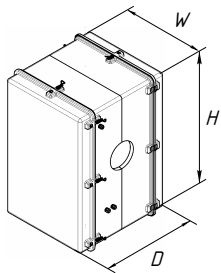


Reinforced fiberglass enclosure  
RizurBox-C-M6



Reinforced fiberglass enclosure  
RizurBox-C-M2

## Horizontally/vertically-split enclosures


**Design variant**

RizurBox-C-WD1  
RizurBox-C-WD2  
RizurBox-C-WD3  
RizurBox-C-WD4  
RizurBox-C-WD5  
RizurBox-C-WD6

**Dimensions for reference HxWxD\*, mm**

1140x720x820  
1250x700x500  
600x770x600  
660x770x610  
720x820x610  
670x980x500

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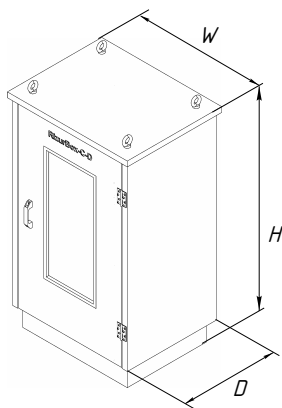


**Reinforced fiberglass enclosure  
RizurBox-C-WD1**



**Reinforced fiberglass enclosure  
RizurBox-C-WD5**

## Modular enclosures with one door


**Design variant**

RizurBox-C-D1  
RizurBox-C-D2  
RizurBox-C-D3  
RizurBox-C-D4  
RizurBox-C-D5  
RizurBox-C-D6  
RizurBox-C-D7  
RizurBox-C-D8  
RizurBox-C-D9  
RizurBox-C-D10  
RizurBox-C-D11  
RizurBox-C-D12  
RizurBox-C-D13  
RizurBox-C-D14  
RizurBox-C-D15  
RizurBox-C-D16  
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RizurBox-C-D18  
RizurBox-C-D19  
RizurBox-C-D20  
RizurBox-C-D21

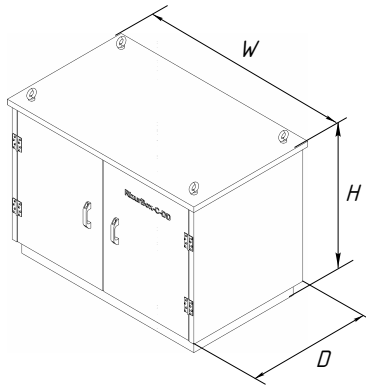
**Dimensions for reference HxWxD\*, mm**

1100x700x700  
1100x900x700  
1100x1100x700  
1100x1300x700  
1100x900x900  
1100x1100x900  
1100x1300x900  
1600x700x700  
1600x900x700  
1600x1100x700  
1600x1300x700  
1600x900x900  
1600x1100x900  
1600x1300x900  
2100x700x700  
2100x900x700  
2100x1100x700  
2100x1300x700  
2100x900x900  
2100x1100x900  
2100x1300x900

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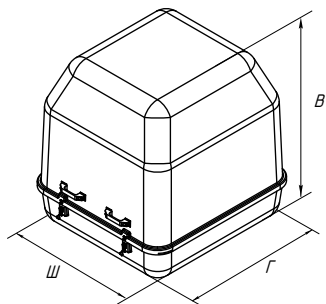
## Modular enclosures with two doors



Design variant	Dimensions for reference HxWxD*, mm
RizurBox-C-DD1	1100x1500x700
RizurBox-C-DD2	1100x1900x700
RizurBox-C-DD3	1100x2100x700
RizurBox-C-DD4	1100x1500x900
RizurBox-C-DD5	1100x1900x900
RizurBox-C-DD6	1100x2100x900
RizurBox-C-DD7	1600x1500x700
RizurBox-C-DD8	1600x1900x700
RizurBox-C-DD9	1600x2100x700
RizurBox-C-DD10	1600x1500x900
RizurBox-C-DD11	1600x1900x900
RizurBox-C-DD12	1600x2100x900
RizurBox-C-DD13	2100x1500x700
RizurBox-C-DD14	2100x1900x700
RizurBox-C-DD15	2100x2100x700
RizurBox-C-DD16	2100x1500x900
RizurBox-C-DD17	2100x1900x900
RizurBox-C-DD18	2100x2100x900

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## Enclosures with horizontal opening and all-around access to equipment



Модель	Размеры для справок ВxШxГ*, мм
РизурБокс-С-У1	1100x1500x700
РизурБокс-С-У2	1100x1900x700
РизурБокс-С-У3	1100x2100x700



Reinforced fiberglass enclosure  
RizurBox-C-DD4



Reinforced fiberglass enclosure  
RizurBox-C-D9



Reinforced fiberglass enclosure  
RizurBox-C-U1



# INQUIRY FORM № \_\_\_\_\_

## Reinforced fiberglass enclosures RizurBox-C (page 1 of 3)

Company	
Name of the facility	
Contact person	
Phone/fax/e-mail	
Min. and max. operation temperatures, °C	from _____ to _____
Position tag	
Installed equipment specification (specify ordering codes for equipment, valve assemblies, etc.)	
Number of enclosures acc. to the inquiry form	_____ pcs.

### Enclosure variant RizurBox-C HxWxD, mm

Diagonally opening enclosures		Diagonally opening enclosures with a tray		CASE type	
<input type="checkbox"/> RizurBox-C-2	365x360x385	<input type="checkbox"/> RizurBox-C-T7	820x470x470	<input type="checkbox"/> RizurBox-C-B-M*	780x1300x510
<input type="checkbox"/> RizurBox-C-4	490x460x390	<input type="checkbox"/> RizurBox-C-T8	820x840x470	<input type="checkbox"/> RizurBox-C-B2-M*	900x1210x760
<input type="checkbox"/> RizurBox-C-5	490x585x390	<input type="checkbox"/> RizurBox-C-T12	800x970x640	<input type="checkbox"/> RizurBox-C-B2-B*	900x1210x760
<input type="checkbox"/> RizurBox-C-6	510x470x420	<input type="checkbox"/> RizurBox-C-T13	540x540x940	<input type="checkbox"/> RizurBox-C-B2-H*	900x1210x760
<input type="checkbox"/> RizurBox-C-7	610x470x470	<input type="checkbox"/> RizurBox-C-T14	850x390x380	<input type="checkbox"/> RizurBox-C-B2-L*	1100x1210x760
<input type="checkbox"/> RizurBox-C-7,5	650x700x500	<input type="checkbox"/> RizurBox-C-T15	1090x390x390	<input type="checkbox"/> RizurBox-C-B2-Lm*	1080x1290x780
<input type="checkbox"/> RizurBox-C-8	610x840x470	<input type="checkbox"/> RizurBox-C-T16	900x820x440	<input type="checkbox"/> RizurBox-C-B3-M*	750x920x760
<input type="checkbox"/> RizurBox-C-9	660x1010x470	Horizontally/vertically split enclosures		<input type="checkbox"/> RizurBox-C-B3-B*	900x920x760
<input type="checkbox"/> RizurBox-C-10	680x680x680	<input type="checkbox"/> RizurBox-C-WD1	1140x720x820	<input type="checkbox"/> RizurBox-C-B3-H*	900x920x760
<input type="checkbox"/> RizurBox-C-11	750x595x680	<input type="checkbox"/> RizurBox-C-WD2	1250x700x500	<input type="checkbox"/> RizurBox-C-B3-L*	1100x920x760
<input type="checkbox"/> RizurBox-C-12	650x970x560	<input type="checkbox"/> RizurBox-C-WD3	570x710x590	<input type="checkbox"/> RizurBox-C-B4-B*	900x1520x760
<input type="checkbox"/> RizurBox-C-13	570x750x600	<input type="checkbox"/> RizurBox-C-WD4	714x610x560	<input type="checkbox"/> RizurBox-C-B4-L*	1100x1520x760
<input type="checkbox"/> RizurBox-C-16	760x860x760	<input type="checkbox"/> RizurBox-C-WD5	770x670x560	<input type="checkbox"/> RizurBox-C-B4-M*	750x1520x760
MULTI type		<input type="checkbox"/> RizurBox-C-WD6	670x980x500	<input type="checkbox"/> RizurBox-C-B5-B*	640x890x490
<input type="checkbox"/> RizurBox-C-M1	420x250x350	Enclosures with horizontal opening and all-around access to equipment		Enclosures with classical opening	
<input type="checkbox"/> RizurBox-C-M2	680x480x380	<input type="checkbox"/> RizurBox-C-U1	435x415x350	<input type="checkbox"/> RizurBox-C-W1	600x400x350
<input type="checkbox"/> RizurBox-C-M3	760x560x560	<input type="checkbox"/> RizurBox-C-U2	435x415x500	<input type="checkbox"/> RizurBox-C-W2	1000x600x500
<input type="checkbox"/> RizurBox-C-M4	500x500x500	<input type="checkbox"/> RizurBox-C-U3	1105x960x1030	<input type="checkbox"/> RizurBox-C-W3	1000x600x350
<input type="checkbox"/> RizurBox-C-M5	610x450x400	Different size: RizurBox-C Model: _____ HxWxD: _____x_____x_____		<input type="checkbox"/> RizurBox-C-W4	1000x1000x400
<input type="checkbox"/> RizurBox-C-M6	680x480x450			<input type="checkbox"/> RizurBox-C-W5	500x470x300
<input type="checkbox"/> RizurBox-C-M7	350x440x420			<input type="checkbox"/> RizurBox-C-W6	850x530x350
<input type="checkbox"/> RizurBox-C-M8	500x440x420			<input type="checkbox"/> RizurBox-C-W7	400x400x250
<input type="checkbox"/> RizurBox-C-M9	385x265x200			<input type="checkbox"/> RizurBox-C-W8	500x470x300
<input type="checkbox"/> RizurBox-C-M10	380x430x430			<input type="checkbox"/> RizurBox-C-W9	1000x800x500

### MODULAR ENCLOSURES RizurBox-C-D, RizurBox-C-DD

Height, mm	Width, mm		Depth, mm	<input type="checkbox"/> Window  <input type="checkbox"/> Additional insulation (flexible elastomeric foam with metal covering)
	1 door	2 doors		
<input type="checkbox"/> 1100	<input type="checkbox"/> 700	<input type="checkbox"/> 1500	<input type="checkbox"/> 700	
<input type="checkbox"/> 1600	<input type="checkbox"/> 900	<input type="checkbox"/> 1700	<input type="checkbox"/> 900	
<input type="checkbox"/> 2100	<input type="checkbox"/> 1100	<input type="checkbox"/> 1900	<input type="checkbox"/> 1100	
<input type="checkbox"/> _____ other	<input type="checkbox"/> 1300	<input type="checkbox"/> 2100	<input type="checkbox"/> _____ other	

### Mounting elements for the equipment:

<input type="checkbox"/> Tube adapter (OD=57mm)	<input type="checkbox"/> Mounting panel	<input type="checkbox"/> DIN-rail	<input type="checkbox"/> Mounting rails	<input type="checkbox"/> Other
<input type="checkbox"/> Standard (250 mm) <input type="checkbox"/> Non-standard _____	<input type="checkbox"/> Standard (260x340 mm) <input type="checkbox"/> Non-standard _____	<input type="checkbox"/> DIN _____mm, L _____mm, _____pcs. <input type="checkbox"/> DIN _____mm, L _____mm, _____pcs.	<input type="checkbox"/> L _____mm, _____pcs. <input type="checkbox"/> L _____mm, _____pcs. <input type="checkbox"/> L _____mm, _____pcs. <input type="checkbox"/> L _____mm, _____pcs.	Describe the required mounting parts in the field «Additional information»

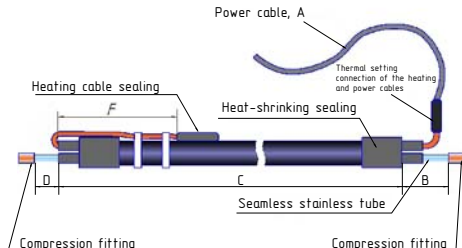
\* The letters L and M in the names of various models of enclosures signify that the upper part is equal to the lower part. The letter B is used if the upper part of the enclosure is larger than the lower one. The letter H shows that the lower part of enclosure is larger than the upper one.



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## INQUIRY FORM № \_\_\_\_\_

Reinforced fiberglass enclosures RizurBox-C (page 2 of 3)

Mounting elements for enclosure:	Heating:
<input type="checkbox"/> Without mounting elements <input type="checkbox"/> Floor - floor stand (enclosure is mounted on a horizontal surface). Standard height 1000 mm If not standard, please specify H=_____ mm <u>Variants of floor mounting:</u> <input type="checkbox"/> mounting under the bottom <input type="checkbox"/> mounting to enclosure rear wall <input type="checkbox"/> Wall hanging - rail for enclosure mounting onto vertical surface <input type="checkbox"/> On site fence rail <input type="checkbox"/> On a pipeline - clamps for enclosure mounting on a pipeline Please, specify the external diameter of the pipe Ø=_____ mm <u>Options for mounting on a pipeline:</u> <input type="checkbox"/> Horizontal pipe passes through enclosure <input type="checkbox"/> Vertical pipe passes through enclosure <input type="checkbox"/> Horizontal pipe passes under enclosure <input type="checkbox"/> Vertical pipe passes behind enclosure <input type="checkbox"/> On a flange Please, specify flange diameter Ø=_____ mm <input type="checkbox"/> Other Specify the necessary mounting elements _____	<input type="checkbox"/> Without heating <input type="checkbox"/> Electric heating: <input type="checkbox"/> FT-variant <input type="checkbox"/> ST-variant -maintaining _____ °C (specify within the range of -40°C ...+50°C) <input type="checkbox"/> SR-variant -maintaining _____ °C (specify within the range of -40°C ...+50°C) -temperature when alarm indication is on (relay output) _____ °C / _____ °C <input type="checkbox"/> AR-variant <u>Heating power:</u> <input type="checkbox"/> recommended by the manufacturer <input type="checkbox"/> _____ W <input type="checkbox"/> Heat-exchange pipe (water/steam) <input type="checkbox"/> welded <input type="checkbox"/> thread G3/4" <input type="checkbox"/> thread G1/2" <input type="checkbox"/> other thread _____
<b>Cable/tube glands:</b>	
Heating power cable Ø _____ mm metal hose Ø _____ mm, _____ pcs Cable/tube Ø _____ mm metal hose Ø _____ mm, _____ pcs Cable/tube Ø _____ mm metal hose Ø _____ mm, _____ pcs Cable/tube Ø _____ mm metal hose Ø _____ mm, _____ pcs Heat-insulated gland PILT _____ pcs	<u>Holes for cable glands and impulse lines:</u> <input type="checkbox"/> not drilled (supplied as a set) <input type="checkbox"/> drilled (it's necessary to specify the holes layout in your order)
<b>Impulse tubing heating:</b>	
<input type="checkbox"/> Without heating <input type="checkbox"/> Preinsulated tubing bundle of impulse lines RizurPak (see below) <input type="checkbox"/> Soft enclosure RIZUR for impulse tubes (see below)	
<b>Preinsulated tubing bundle of impulse lines RizurPak</b>	
Length of tubing bundle _____ m Quantity of impulse tubes inside the bundle, _____ pcs. External diameter of impulse tubes _____ mm Maximum temperature of the medium in the tubes _____ °C Temperature of cleaning/steam-cleaning _____ °C Medium temperature maintained in the tube _____ °C Maximum pressure _____ MPa <input type="checkbox"/> Compression fitting for process connection _____ pcs. Process connection thread type: male/female _____ <input type="checkbox"/> Compression fitting for equipment connection _____ pcs. Equipment connection thread type male/female _____ <input type="checkbox"/> Heat shrinks for sealing bundle ends _____ pcs. <input type="checkbox"/> Sealing kit for junction box entry and heating cable termination _____ pcs. <input type="checkbox"/> Adjustable thermoregulator for maintaining the exact temperature inside the bundle (shipped with a coating repair kit for installing the thermoregulator sensor under the bundle coating) _____ pcs. <input type="checkbox"/> Insulation repair kit in the event of external insulation damage _____ pcs. <input type="checkbox"/> Sealant heat-shrinkable fitting for tubing bundle entry into an enclosure _____ pcs. (Please, specify enclosure wall width - _____ mm)	<u>Scope of supply:</u> <input type="checkbox"/> Fully assembled tubing bundle of impulse lines (see the scheme below) Specify the length in accordance with the scheme: A= _____ mm C= _____ mm B= _____ mm D= _____ mm F= _____ mm <input type="checkbox"/> Tubes shipped in coils, without preliminary cutting or other preparations. Specify the required length of bundle: _____ m <input type="checkbox"/> Shipped as tube segments of specified lengths, without preliminary sealing or other preparations Specify the required length of the bundle: _____
	



# INQUIRY FORM № \_\_\_\_\_

## Reinforced fiberglass enclosures RizurBox-C (page 3 of 3)

<b>Soft enclosure RIZUR for impulse tubes</b>
Length of the enclosure (tubing bundle) _____ m External diameter of impulse tubes inside the bundle _____ mm Maximum temperature of the medium in tubes _____ °C Temperature of cleaning/steam cleaning _____ °C Medium temperature maintained in the tube _____ °C
<b>Heating of the pressure tap</b>
<input type="checkbox"/> Soft enclosure for the pressure tap (root, tap, diaphragm, etc.) Please, provide a drawing of the pressure tap point
<b>Delivery options</b>
<input type="checkbox"/> <b>Basic</b> (all parts are shipped non-assembled)  <input type="checkbox"/> <b>Standard</b> (similar to the Basic set, except the heating system and all mounting components inside the enclosure are assembled)  <input type="checkbox"/> <b>System</b> (similar to the Standard set, except it includes all the required connecting, locking and regulating components (fittings, taps, valves, impulse tubes, pre-insulated tubing bundles RizurPak, valve assemblies, etc.)  <u>For System set, you need the following :</u> 1. Provide the layout of tubing/impulse framework in the enclosure 2. Specify maximum temperature of the medium in the tubes _____ °C 3. Specify maximum pressure in the tubes _____ MPa  <input type="checkbox"/> <b>Full set</b> (Full set includes an assembled unit ready for connection on-site, with control and measuring equipment installed) <u>For Full set you need the following:</u> 1. Provide the layout of tubing/impulse framework in the enclosure 2. Provide a full list of control and measuring equipment to be installed <input type="checkbox"/> the equipment is delivered by the Customer <input type="checkbox"/> the equipment is delivered by the Supplier (specify the exact codes for the required equipment or inquiry forms with preferable manufacturers) 3. Specify maximum temperature of the medium in the tubes _____ °C 4. Specify maximum pressure in the tubes _____ MPa
<b>Additional information</b>

If the phrasing in the inquiry form seems unclear or there're any other questions,  
please phone for an explanation +7 (4912) 20-20-80

### RizurBox on-site



## RizurBox on-site





# Insulated metal enclosures

## RizurBox-M

### Intended use and application area

RizurBox-M enclosures are manufactured according to TU-3442-001-12189681-2014 and are designed for different types of equipment (pressure sensors, flowmeters, level meters, network devices, shut-off valves, etc.) in outdoor and indoor facilities.

Enclosures RizurBox-M are used for the protection of the equipment from the impact of negative temperatures, condensation, atmosphere precipitation, dust, chemicals, physical damages, unlawful access, theft, etc.

Application area - hazardous areas of the indoor and outdoor facilities in accordance with the markings, industry safety instructions, and the manufacturer's recommendations.

All enclosures are made of inflammable materials and have all the necessary certification.



- **We can manufacture enclosures of any type and dimensions in accordance with the Customer's requirements.**

### Design description

Insulated enclosures RizurBox-M are welded constructions manufactured using modern high-quality equipment. The body of the enclosure is made out of carbon steel 1,5 mm thick. The inside panels are made out of galvanized steel at least 1 mm thick. Walls and doors of the enclosure are insulated. Non-flammable mineral mats or heat-insulating materials on the basis of foamed synthetic rubber are used as an insulator. The thickness of the wall in the double-walled design variant is 45 mm.

Enclosures RizurBox-M are also manufactured as single-wall constructions with an insulator of 10...40 mm thickness with a shielding coating glued onto the inside surface. The outer surface of the enclosure is carefully processed with a power-polymer coating applied later to protect the surface from the impact of the environmental factors and premature corrosion.

Depending on the intended use and dimensions, the enclosure can be made either with a supporting frame or without it. In the design variant without the supporting frame, the pressure is distributed along the enclosure walls. The standard supporting frame is a welded steel construction made out of a non-circular tube or an integrated power rack.

Main materials used for the production of the body and supporting frame of the enclosure are different kinds of steel: general-purpose and stainless. It's possible to manufacture the enclosure in a split-type design if there's a need for mounting the enclosure onto the pipeline or to install the large-size equipment. The doors and splitting points have insulation made from cold-resistant rubber along the perimeter. The insulation protects the housing from heat-loss and penetration of the atmosphere precipitation, providing ingress protection of at least IP 54.

## Technical specifications

Installation area	General industrial areas Explosion hazard zones V-1a and V-1g acc. to Regulations of equipment installation (PUE), Ch.7.3
Ingress protection	IP54 acc. to GOST1425-96 IP65 acc. to GOST1425-96 (on request) IP66 acc. to GOST1425-96 (on request)
Operating temperature	-60 ...+70 °C -70 ...+100 °C (on request)
Wall thickness	10 ... 50 mm (depending on the enclosure's design variant)
Metal thickness	1,2...2 mm (depending on the enclosure's design variant)
Thermal conductivity	0,03 W/(m·K)
Fittings materials (locks, hinges)	Galvanized steel, stainless steel
Surface resistance (antistatic agent)	Less than 10 <sup>9</sup> Ohm
Temperature maintained inside	-40 ... +100 °C (depending on the heating system used)
Explosion protection marking	
<ul style="list-style-type: none"> <li>enclosure with electric heating (enclosure with electric heating)</li> </ul>	II Gb IIC T6...T3 X 1Ex e mb IIC T6...T3 Gb X 1Ex e d IIC T6...T3 Gb X 1Ex e d mb IIC T6...T3 Gb X 1Ex e d IIB T6...T3 Gb X 1Ex e d mb IIB T6...T3 Gb X 1Ex e IIC T6...T3 Gb X (depending on the design variant of the heater and thermoregulator used)
<ul style="list-style-type: none"> <li>with a heating section</li> </ul>	1 Ex e IIC T6...T3 Gb X
<ul style="list-style-type: none"> <li>water /steam heating under 195 °C</li> </ul>	II Gb IIC T3 X or II Gb IIB T3 X
<ul style="list-style-type: none"> <li>water /steam heating under 130 °C</li> </ul>	II Gb IIC T4 X or II Gb IIB T4 X
<ul style="list-style-type: none"> <li>water /steam heating under 95 °C</li> </ul>	II Gb IIC T5 X or II Gb IIB T5 X
<ul style="list-style-type: none"> <li>water /steam heating under 80 °C</li> </ul>	II Gb IIC T6 X or II Gb IIB T6 X
<ul style="list-style-type: none"> <li>without heating</li> </ul>	II Gb IIC or II Gb IIB
Colour	Dark grey (antique-silver) Any colour (on request)
Warranty period	12 months 24/36 months (on request)
Average operation time	Over 10 years

## Delivery options:

### Basic set

The Basic set includes an enclosure and all components that are supplied separately: mounting elements for equipment installation, mounting elements for enclosure installation, tube heat exchanger (water steam), electric heater/heating section, temperature control device, signaling system, lamp, junction box, cable, and tube glands, blind flanges, junctions, bolts, washers, nuts, etc.

Thus, the Basic set includes everything required for the installation, performed by the Customer or by an installation crew.

### Standard set

The Standard set is almost identical to the Basic set. However, the heaters and the inside mounting elements are installed in accordance with the Customer's technical drawing.

The installation of the enclosure is performed by the Customer or by an installation crew. Monitoring and measuring equipment is installed and connected by the Customer or by an installation crew.



## System Set

The System set is similar to the Standard set but apart from the heating system and the mounting elements it also includes all the necessary connecting, shut-off, and control equipment (fittings, valves, impulse tubes, pre-insulated tube bundles RizurPak, valve device assemblies, etc.).

This set is a package solution combining different types of equipment (enclosures, soft enclosures, pre-insulated impulse tubes, equipment of other manufacturers).

The Customer or an installation crew only have to install the control and measurement equipment inside and mount the enclosure itself.

## Complete set

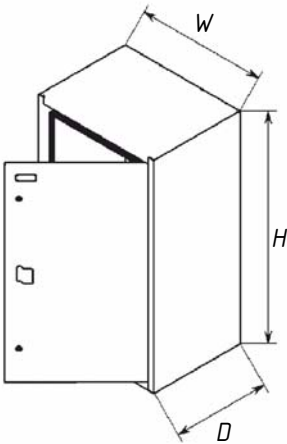
The Complete set is a fully assembled and ready-for-connection unit with installed control and measuring equipment. The control and measuring equipment is specified by the Customer:

- it can be selected by the engineers of RIZUR in accordance with the requirements of the Customer.
- it can be specified by the Customer.
- it can be selected and supplied by the Customer.

This set is a packaged solution that contains a fully-equipped metering station which is ready for installation.

## Standard variants of the enclosures:

### Enclosures RizurBox-M with a classical opening

	Design variant	Dimensions HxWxD*, mm	Design variant	Dimensions HxWxD*, mm
		RizurBox-M-RK-450x600x650	450x600x650	RizurBox-M-RK-1200x800x600
	RizurBox-M-RK-500x350x210	500x350x210	RizurBox-M-RK-1250x1800x500	1250x1800x500
	RizurBox-M-RK-500x500x400	500x500x400	RizurBox-M-RK-1350x500x300	1350x500x300
	RizurBox-M-RK-600x500x500	600x500x500	RizurBox-M-RK-1400x700x600	1400x700x600
	RizurBox-M-RK-600x500x600	600x500x600	RizurBox-M-RK-1400x800x600	1400x800x600
	RizurBox-M-RK-600x600x600	600x600x600	RizurBox-M-RK-1490x1790x800	1490x1790x800
	RizurBox-M-RK-600x900x600	600x900x600	RizurBox-M-RK-1500x600x600	1500x600x600
	RizurBox-M-RK-650x400x600	650x400x600	RizurBox-M-RK-1500x1400x2000	1500x1400x2000
	RizurBox-M-RK-745x745x630	745x745x630	RizurBox-M-RK-1600x800x500	1600x800x500
	RizurBox-M-RK-800x500x500	800x500x500	RizurBox-M-RK-1600x800x740	1600x800x740
	RizurBox-M-RK-800x600x500	800x600x500	RizurBox-M-RK-1600x1200x500	1600x1200x500
	RizurBox-M-RK-800x1100x600	800x1100x600	RizurBox-M-RK-1600x1400x800	1600x1400x800
	RizurBox-M-RK-1000x600x300	1000x600x300	RizurBox-M-RK-1700x600x600	1700x600x600
	RizurBox-M-RK-1000x600x500	1000x600x500	RizurBox-M-RK-1850x900x500	1850x900x500
	RizurBox-M-RK-1000x600x600	1000x600x600	RizurBox-M-RK-1850x1300x1300	1850x1300x1300
	RizurBox-M-RK-1000x800x600	1000x800x600	RizurBox-M-RK-2000x700x700	2000x700x700
	RizurBox-M-RK-1000x1500x1000	1000x1500x1000	RizurBox-M-RK-2000x990x990	2000x990x990
	RizurBox-M-RK-1090x890x480	1090x890x480	RizurBox-M-RK-2000x1400x750	2000x1400x750
	RizurBox-M-RK-1100x700x700	1100x700x700	RizurBox-M-RK-2060x900x600	2060x900x600
	RizurBox-M-RK-1190x690x690	1190x690x690	RizurBox-M-RK-2100x1600x800	2100x1600x800
	RizurBox-M-RK-1200x600x600	1200x600x600	RizurBox-M-RK-2100x2000x1100	2100x2000x1100
	RizurBox-M-RK-1200x800x500	1200x800x500	RizurBox-M-RK-2200x1000x600	2200x1000x600

\*The sizes of enclosures are for reference. To get the drawings with precise dimensional and internal specifications of enclosures, please contact RIZUR engineering department, +7 (4912) 20-20-80, marketing@rizur.ru



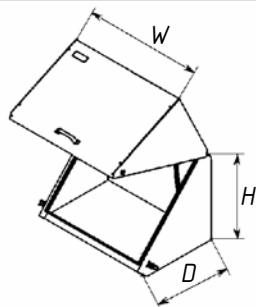
Enclosure RizurBox-M-RK



Enclosures RizurBox-M-RK, multiple-door execution



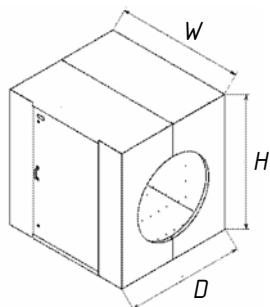
## Enclosures RizurBox-M-RD with diagonal opening



Design variant	Dimensions HxWxD*, mm
RizurBox-M-RD-550x400x400	550x400x400
RizurBox-M-RD-650x600x600	650x600x600
RizurBox-M-RD-650x850x600	650x850x600
RizurBox-M-RD-650x1100x600	650x1100x600
RizurBox-M-RD-650x890x600	650x890x600
RizurBox-M-RD-750x600x400	750x600x400

\* The sizes of enclosures are for reference. To get the drawings with precise dimensional and internal specifications of enclosures, please contact RIZUR engineering department, +7(4912) 20-20-80, marketing@rizur.ru

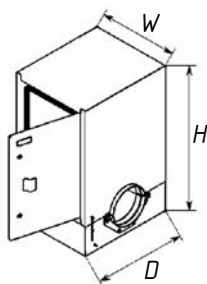
## Enclosures RizurBox-M-RV with vertical opening



Design variant	Dimensions HxWxD*, mm
RizurBox-M-RV-800x1700x800	800x1700x800
RizurBox-M-RV-1085x2685x585	1085x2685x585
RizurBox-M-RV-1600x1280x800	1600x1280x800
RizurBox-M-RV-1730x1650x1520	1730x1650x1520
RizurBox-M-RV-2100x1600x800	2100x1600x800

\* The sizes of enclosures are for reference. To get the drawings with precise dimensional and internal specifications of enclosures, please contact RIZUR engineering department, +7(4912) 20-20-80, marketing@rizur.ru

## Enclosures RizurBox-M-RG with horizontal opening



Design variant	Dimensions HxWxD*, mm
RizurBox-M-RG-1100x600x700	1100x600x700
RizurBox-M-RG-1150x1200x600	1150x1200x600
RizurBox-M-RG-1200x2100x1100	1200x2100x1100
RizurBox-M-RG-1400x800x600	1400x800x600
RizurBox-M-RG-1400x1200x1000	1400x1200x1000

\* The sizes of enclosures are for reference. To get the drawings with precise dimensional and internal specifications of enclosures, please contact RIZUR engineering department, +7(4912) 20-20-80, marketing@rizur.ru



Enclosures RizurBox-M-RG



Enclosures RizurBox-M-RD

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# INQUIRY FORM № \_\_\_\_\_

## Insulated metal enclosure RizurBox-M (page 1 of 3)

Company			
Name of the facility			
Contact person			
Phone/fax/e-mail			
Min. and max. operation temperatures, °C		from _____ to _____	
Position tag			
Installed equipment specification (specify ordering codes for equipment, valve assemblies, etc.)			
Number of enclosures acc. to the inquiry form		_____ pcs.	
<b>Enclosure variant RizurBox-M HxWxD, mm</b>			
<b>Diagonal opening</b> <input type="checkbox"/> RizurBox-M-RD-550x400x400 <input type="checkbox"/> RizurBox-M-RD-650x600x600 <input type="checkbox"/> RizurBox-M-RD-650x850x600 <input type="checkbox"/> RizurBox-M-RD-650x1100x600 <input type="checkbox"/> RizurBox-M-RD-650x890x600 <input type="checkbox"/> RizurBox-M-RD-750x600x400 <input type="checkbox"/> RizurBox-M-RD-____x____x____ <b>Classical opening</b> <input type="checkbox"/> RizurBox-M-RK-450x600x650 <input type="checkbox"/> RizurBox-M-RK-500x350x210 <input type="checkbox"/> RizurBox-M-RK-500x500x400 <input type="checkbox"/> RizurBox-M-RK-600x500x500 <input type="checkbox"/> RizurBox-M-RK-600x500x600 <input type="checkbox"/> RizurBox-M-RK-600x600x600 <input type="checkbox"/> RizurBox-M-RK-600x900x600 <input type="checkbox"/> RizurBox-M-RK-650x400x600 <input type="checkbox"/> RizurBox-M-RK-745x745x630 <input type="checkbox"/> RizurBox-M-RK-800x500x500 <input type="checkbox"/> RizurBox-M-RK-800x600x500 <input type="checkbox"/> RizurBox-M-RK-800x1100x600 <input type="checkbox"/> RizurBox-M-RK-1000x600x300 <input type="checkbox"/> RizurBox-M-RK-1000x600x500 <input type="checkbox"/> RizurBox-M-RK-1000x600x600 <input type="checkbox"/> RizurBox-M-RK-1000x800x600 <input type="checkbox"/> RizurBox-M-RK-1000x1500x1000 <input type="checkbox"/> RizurBox-M-RK-1090x890x480 <input type="checkbox"/> RizurBox-M-RK-1100x700x700 <input type="checkbox"/> RizurBox-M-RK-1190x690x690 <input type="checkbox"/> RizurBox-M-RK-1200x600x600 <input type="checkbox"/> RizurBox-M-RK-1200x800x500 <input type="checkbox"/> RizurBox-M-RK-1200x800x600 <input type="checkbox"/> RizurBox-M-RK-1250x1800x500 <input type="checkbox"/> RizurBox-M-RK-1350x500x300		<input type="checkbox"/> RizurBox-M-RK-1400x700x600 <input type="checkbox"/> RizurBox-M-RK-1400x800x600 <input type="checkbox"/> RizurBox-M-RK-1490x1790x800 <input type="checkbox"/> RizurBox-M-RK-1500x600x600 <input type="checkbox"/> RizurBox-M-RK-1500x1400x2000 <input type="checkbox"/> RizurBox-M-RK-1600x800x500 <input type="checkbox"/> RizurBox-M-RK-1600x800x740 <input type="checkbox"/> RizurBox-M-RK-1600x1200x500 <input type="checkbox"/> RizurBox-M-RK-1600x1400x800 <input type="checkbox"/> RizurBox-M-RK-1700x600x600 <input type="checkbox"/> RizurBox-M-RK-1850x900x500 <input type="checkbox"/> RizurBox-M-RK-1850x1300x1300 <input type="checkbox"/> RizurBox-M-RK-2000x700x700 <input type="checkbox"/> RizurBox-M-RK-2000x990x990 <input type="checkbox"/> RizurBox-M-RK-2000x1400x750 <input type="checkbox"/> RizurBox-M-RK-2060x900x600 <input type="checkbox"/> RizurBox-M-RK-2100x1600x800 <input type="checkbox"/> RizurBox-M-RK-2100x2000x1100 <input type="checkbox"/> RizurBox-M-RK-2200x1000x600 <input type="checkbox"/> RizurBox-M-RK-____x____x____ <b>Vertically-split</b> <input type="checkbox"/> RizurBox-M-RV-800x1700x800 <input type="checkbox"/> RizurBox-M-RV-1085x2685x585 <input type="checkbox"/> RizurBox-M-RV-1600x1280x800 <input type="checkbox"/> RizurBox-M-RV-1730x1650x1520 <input type="checkbox"/> RizurBox-M-RV-2100x1600x800 <input type="checkbox"/> RizurBox-M-RV-____x____x____ <b>Horizontally-split</b> <input type="checkbox"/> RizurBox-M-RG-1100x600x700 <input type="checkbox"/> RizurBox-M-RG-1150x1200x600 <input type="checkbox"/> RizurBox-M-RG-1200x2100x1100 <input type="checkbox"/> RizurBox-M-RG-1400x800x600 <input type="checkbox"/> RizurBox-M-RG-1400x1200x1000 <input type="checkbox"/> RizurBox-M-RG-____x____x____	
		<b>Options</b>	
		<input type="checkbox"/> Observation window  <input type="checkbox"/> Additional insulation (foamed insulator with metallized coating)  <input type="checkbox"/> Non-insulated  <input type="checkbox"/> Insulated, single-walled (foamed insulator with metallized coating)  <input type="checkbox"/> Made from stainless steel  <input type="checkbox"/> RAL _____ (powder-polymer coating «antique silver»)	
<b>Mounting elements for the equipment:</b>			
<input type="checkbox"/> Tube adapter (OD=57mm)  <input type="checkbox"/> Standard (250 mm) <input type="checkbox"/> Non-standard _____	<input type="checkbox"/> Mounting panel  <input type="checkbox"/> Standard (260x340 mm) <input type="checkbox"/> Non-standard _____	<input type="checkbox"/> DIN-rail  <input type="checkbox"/> DIN _____mm, L _____mm, _____pcs.  <input type="checkbox"/> DIN _____mm, L _____mm, _____pcs.	<input type="checkbox"/> Mounting rails <input type="checkbox"/> L _____mm, _____pcs. <input type="checkbox"/> L _____mm, _____pcs. <input type="checkbox"/> L _____mm, _____pcs. <input type="checkbox"/> L _____mm, _____pcs.
			<input type="checkbox"/> Other  Describe the required mounting parts in the field «Additional information»



# INQUIRY FORM № \_\_\_\_\_

## Reinforced fiberglass enclosures RizurBox-M (page 2 of 3)

Mounting elements for enclosure:	Heating:
<input type="checkbox"/> Without mounting elements	<input type="checkbox"/> Without heating
<input type="checkbox"/> Floor - floor stand (enclosure is mounted on a horizontal surface) . Standard height 1000 mm If not standard, please specify H=_____ mm  <u>Variants of floor mounting:</u> <input type="checkbox"/> mounting under the bottom <input type="checkbox"/> mounting to enclosure rear wall	<input type="checkbox"/> Electric heating: <input type="checkbox"/> FT-variant  <input type="checkbox"/> ST-variant -maintaining _____ °C (specify within the range of -40°C ...+50°C)  <input type="checkbox"/> SR-variant -maintaining _____ °C (specify within the range of -40°C ...+50°C) -temperature when alarm indication is on (relay output) _____ °C / _____ °C  <input type="checkbox"/> AR-variant  <u>Heating power:</u> <input type="checkbox"/> recommended by the manufacturer  <input type="checkbox"/> _____ W
<input type="checkbox"/> Wall hanging - rail for enclosure mounting onto vertical surface. <input type="checkbox"/> On site fence rail	
<input type="checkbox"/> On a pipeline - clamps for enclosure mounting on a pipeline Please, specify the external diameter of the pipe Ø=_____ mm  <u>Options for mounting on a pipeline:</u> <input type="checkbox"/> Horizontal pipe passes through enclosure <input type="checkbox"/> Vertical pipe passes through enclosure <input type="checkbox"/> Horizontal pipe passes under enclosure <input type="checkbox"/> Vertical pipe passes behind enclosure	
<input type="checkbox"/> On a flange Please, specify flange diameter Ø=_____ mm	<input type="checkbox"/> Heat-exchange pipe (water/steam) <input type="checkbox"/> welded <input type="checkbox"/> thread G3/4" <input type="checkbox"/> thread G1/2" <input type="checkbox"/> other thread _____
<input type="checkbox"/> Other Specify the necessary mounting elements _____	

### Cable/tube glands:

Heating power cable Ø \_\_\_\_\_ mm metal hose Ø \_\_\_\_\_ mm, \_\_\_\_\_ pcs  
 Cable/tube Ø \_\_\_\_\_ mm metal hose Ø \_\_\_\_\_ mm, \_\_\_\_\_ pcs  
 Cable/tube Ø \_\_\_\_\_ mm metal hose Ø \_\_\_\_\_ mm, \_\_\_\_\_ pcs  
 Cable/tube Ø \_\_\_\_\_ mm metal hose Ø \_\_\_\_\_ mm, \_\_\_\_\_ pcs  
 Heat-insulated gland PILT \_\_\_\_\_ pcs

**Holes for cable glands and impulse lines:**  
 not drilled (supplied as a set)  
 drilled (it's necessary to specify the holes layout in your order)

### Impulse tubing heating:

- Without heating  
 Preinsulated tubing bundle of impulse lines RizurPak (see below)  
 Soft enclosure RIZUR for impulse tubes (see below)

#### Preinsulated tubing bundle of impulse lines RizurPak

Length of tubing bundle \_\_\_\_\_ m  
 Quantity of impulse tubes inside the bundle, \_\_\_\_\_ pcs.  
 External diameter of impulse tubes \_\_\_\_\_ mm  
 Maximum temperature of the medium in the tubes \_\_\_\_\_ °C  
 Temperature of cleaning/steam-cleaning \_\_\_\_\_ °C  
 Required maintained temperature of the medium in the tube \_\_\_\_\_ °C  
 Maximum pressure in the tube \_\_\_\_\_ MPa  
 Compression fitting for process connection \_\_\_\_\_ pcs.  
 Process connection thread type: male/female \_\_\_\_\_  
 Compression fitting for equipment connection \_\_\_\_\_ pcs.  
 Equipment connection thread type male/female \_\_\_\_\_  
 Heat shrinks for sealing bundle ends \_\_\_\_\_ pcs.  
 Sealing kit for junction box entry and heating cable termination \_\_\_\_\_ pcs.  
 Adjustable thermoregulator to maintain exact temperature inside the bundle (shipped with a coating repair kit for installing the thermoregulator sensor under the bundle coating) \_\_\_\_\_ pcs.  
 Insulation repair kit in the event of external insulation damage \_\_\_\_\_ pcs.  
 Sealant heat-shrinkable fitting for tubing bundle entry into an enclosure \_\_\_\_\_ pcs. (Please, specify enclosure wall width - \_\_\_\_\_ mm)

#### Scope of supply:

Fully assembled tubing bundle of impulse lines (see the scheme below)  
 Specify the length in accordance with the scheme:

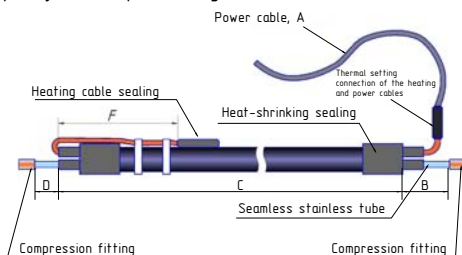
A= \_\_\_\_\_ mm C= \_\_\_\_\_ mm B= \_\_\_\_\_ mm

D= \_\_\_\_\_ mm F= \_\_\_\_\_ mm

Tubes shipped in coils, without preliminary cutting or other preparations.

Specify the required length of bundle: \_\_\_\_\_ m

Shipped as tube segments of specified lengths, without preliminary sealing or other preparations  
 Specify the required length of the bundle: \_\_\_\_\_





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## INQUIRY FORM № \_\_\_\_\_

Reinforced fiberglass enclosures RizurBox-C (page 3 of 3)

<b>Soft enclosure RIZUR for impulse tubes</b>
Length of the enclosure (tubing bundle) _____ m External diameter of impulse tubes inside the bundle _____ mm Maximum temperature of the medium in tubes _____ °C Temperature of cleaning/steam cleaning _____ °C Required temperature of the medium maintained in a tube _____ °C
<b>Heating of the pressure tap</b>
<input type="checkbox"/> Soft enclosure for the pressure tap (root, tap, diaphragm, etc.) Please, provide a drawing of the pressure tap point
<b>Delivery options</b>
<input type="checkbox"/> <b>Basic</b> (all parts are shipped non-assembled)  <input type="checkbox"/> <b>Standard</b> (similar to the Basic set, except the heating system and all mounting components inside the enclosure are assembled)  <input type="checkbox"/> <b>System</b> (similar to the Standard set, except it includes all the required connecting, locking and regulating components (fittings, taps, valves, impulse tubes, pre-insulated tubing bundles RizurPak, valve assemblies, etc.)  <u>For System set, you need the following :</u> 1. Provide the layout of tubing/impulse framework in the enclosure 2. Specify maximum temperature of the medium in the tubes _____ °C 3. Specify maximum pressure in the tubes _____ MPa  <input type="checkbox"/> <b>Full set</b> (Full set includes an assembled unit ready for connection on-site, with control and measuring equipment installed) <u>For Full set you need the following:</u> 1. Provide the layout of tubing/impulse framework in the enclosure 2. Provide a full list of control and measuring equipment to be installed <input type="checkbox"/> the equipment is delivered by the Customer <input type="checkbox"/> the equipment is delivered by the Supplier (specify the exact codes for the required equipment or inquiry forms with preferable manufacturers) 3. Specify maximum temperature of the medium in the tubes _____ °C 4. Specify maximum pressure in the tubes _____ MPa
<b>Additional information</b>

If the phrasing in the inquiry form seems unclear or there're any other questions,  
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# Protective sunshades RizurBox-C-K (fiber-glass) and RizurBox-M-K (metal)

## Intended use and application area

Protective sunshades RizurBox-C-K and RizurBox-M-K are manufactured according to all the technical regulations and are designed for the equipment protection (EC&I, pressure sensors, and indicators, flow meters, level meters, etc.) against exposure to direct sunlight, atmosphere precipitation (snow and rain), accidental mechanical impacts.

Application area - hazardous indoor and outdoor areas, in accordance with the markings, relevant industrial safety guidelines, and manufacturer's recommendations.

Protective sunshades RizurBox-C-K and RizurBox-M-K are made from inflammable materials and have all the necessary certificates.



## Design description

Protective fiberglass sunshades RizurBox-C-K are made of inflammable unsaturated polyester resin and glass-reinforced materials.

Protective metal sunshades RizurBox-M-K are made of carbon steel, stainless steel, galvanized steel, and have a welded construction. Special powder-polymer coating is used for corrosion protection.

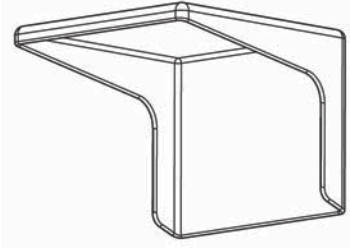
The sunshade's coating is antistatic. It can be mounted vertically, on a vertical/horizontal stand, pipeline, etc. Standard version has all the metal mounting elements made of carbon steel with powder-polymer coating antique-silver (the colour is dark grey).

## Technical specifications

<b>Installation area</b>	General industrial areas Explosion hazard zones B-1a and B-1g acc. to Regulations of equipment installation (PUE), Ch.7.3
<b>Operating temperature</b>	From -70 to +70 °C
<b>Climatic category</b>	UHL1 acc. to GOST 15150-69
<b>Resistance to aggressive environments (depending on the material)</b>	To petroleum materials; To chemically active media; To the UV radiation
<b>Thickness of the sunshade's wall</b>	1 ... 3 mm (for the metal sunshades); 3 ... 6 mm (for the fiberglass sunshades, depending on the sunshade's dimensions)
<b>Material</b>	Fiberglass; Stainless steel; Galvanized steel; Carbon steel
<b>Coating</b>	Without any coating; Powder-polymer coating
<b>Surface resistivity (antistatic)</b>	Less than 10 <sup>9</sup> Ohm
<b>Colour</b>	Dark grey (antique-silver); RAL 7035, light-grey; Any colour acc. to RAL (on request)
<b>Explosion protection marking</b>	II Gb IIC or II Gb IIB
<b>Warranty period</b>	12 months 24/36 months (on request)
<b>Average operation time</b>	Over 10 years

## Standard dimensions of the protective sunshades RizurBox

### Protective metal sunshades RizurBox-M-K, and fiberglass sunshades RizurBox-C-K

	Design variant	Reference dimensions HxWxD*, mm
	RizurBox-C-K1	200x250x260
RizurBox-C-K2	365x320x380	
RizurBox-C-K3	430x495x440	
RizurBox-C-K4	430x750x440	
RizurBox-C-K5	400x300x300	
RizurBox-C-KX	Different dimensions upon an agreement with the manufacturer	
RizurBox-M-K5	440x500x450	
RizurBox-M-K6	440x760x450	
RizurBox-M-KX	Different dimensions upon an agreement with the manufacturer	

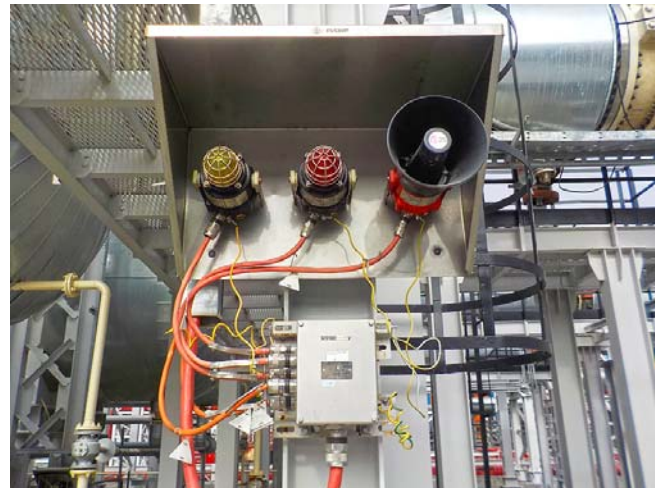
\* Sunshades' dimensions are for references. In order to get the drawings with the exact dimensions, please contact our engineering department OOO «NPO RIZUR» +7 (4912) 20-20-80, [marketing@rizur.ru](mailto:marketing@rizur.ru)



Protective metal sunshade RizurBox-M-K5



Protective fiberglass sunshade RizurBox-C-K4









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## INQUIRY FORM № \_\_\_\_\_

Protective sunshades RizurBox

Company name			
Name of the facility			
Contact person			
Phone/fax/e-mail			
Number of sunshades acc. to the inquiry form		_____ pcs.	
Position tag			
Installed equipment specification			
Design variant		Mounting elements for the sunshade	
Design variant	Dimensions HxWxD, mm	Material	<input type="checkbox"/> Without <input type="checkbox"/> Floor stand complete with clamps Standard height 1500 mm If not standard, specify H=_____ mm <input type="checkbox"/> Clamps for mounting on a tube Please, specify the outer diameter Ø of the tube _____ mm <input type="checkbox"/> Horizontal tube <input type="checkbox"/> Vertical tube <input type="checkbox"/> Plate for the vertical mounting of the sunshade <input type="checkbox"/> Other (specify the necessary mounting elements in the field «Additional data»)
<input type="checkbox"/> RizurBox-C-K1	200x250x260	Fiberglass	
<input type="checkbox"/> RizurBox-C-K2	365x320x380		
<input type="checkbox"/> RizurBox-C-K3	495x440x430		
<input type="checkbox"/> RizurBox-C-K4	750x440x430		
<input type="checkbox"/> RizurBox-C-K5	400x300x300		
<input type="checkbox"/> RizurBox-C-KX	__x__x__		
<input type="checkbox"/> RizurBox-M-K5	440x500x450	Metal	
<input type="checkbox"/> RizurBox-M-K6	440x760x450		
<input type="checkbox"/> RizurBox-M-KX	__x__x__		
Material (only for RizurBox-M-K)		Equipment mounting	
<input type="checkbox"/> Carbon steel		<input type="checkbox"/> Tube adapter OD=57mm Specify the height H= _____ mm <input type="checkbox"/> Vertical adapter <input type="checkbox"/> Horizontal adapter <input type="checkbox"/> Mounting panel Specify the dimensions HxW: _____x mm <input type="checkbox"/> DIN-rail. Specify the length L= _____ mm <input type="checkbox"/> Other (specify the necessary mounting elements in the field «Additional data»)	
<input type="checkbox"/> Stainless steel			
<input type="checkbox"/> Galvanized steel			
Coating (only for RizurBox-M-K)		<input type="checkbox"/> Carbon steel with a powder-polymer coating <input type="checkbox"/> Stainless steel <input type="checkbox"/> Galvanized steel	
<input type="checkbox"/> Without coating			
<input type="checkbox"/> Powder-polymer coating			
Colour		Mounting elements material	
<input type="checkbox"/> RAL7035 (light-grey, standard for RizurBox-C-K) <input type="checkbox"/> Antique silver (dark grey, standard for RizurBox-M-K) <input type="checkbox"/> Other colour acc. to RAL _____			
Additional data			

If the phrasing in the inquiry form seems unclear or there're any other questions,  
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# Mounting elements for enclosures

- 1 - fastening for a flange
- 2 - fastening for a weldolet
- 3 - heating tube
- 4 - tube adapter
- 5 - floor-stand
- 6 - mounting pad
- 7 - insulation adapter
- 8 - clamp with a welded flange
- 9 - clamp for a horizontal tube
- 10 - mounting panel
- 11 - mounting clip
- 12 - mounting rail



## Design description

Mounting elements are used both for installation of the enclosures themselves (on-site in the required position) and the protected equipment inside them.

Mounting clips (11) attached to the bottom or back surface are used for the installation of the enclosure on a horizontal or vertical surface.

Floor-stand (5) with an attached mounting pad (6) are used in order to install the enclosure at a certain distance from a horizontal surface.

A special fastening (2) is used for the mounting of small enclosures, such as Rizur-Box-C-Multi. Big enclosures are mounted onto the pipelines with the help of the clamps for a horizontal tube (9). In this case, the weldolet enters the enclosure through the opening in its bottom surface.

Heating enclosures with diagonal, horizontal, and vertical openings are mounted to pipelines with the help of clamps with welded flanges (8).

An insulation adapter (7) is used to ensure thermal insulation of the cable glands for the impulse lines.

If the enclosure is to be heated with hot water/steam then a heating tube (3) should be placed inside.

Mounting rails (12), mounting panels (10), and tube adapters (4) are used to install equipment inside the enclosure.

Some other mounting elements can be used depending on specific technical requirements.



Example of equipment mounting



## Supports and stands



### Design description

Supports and stands manufactured by OOO «NPO RIZUR» are designed for the installation of the control and measuring equipment (EC&I). The products are easy to assemble and mount combined with various elements. By choosing supports and stands manufactured OOO «NPO RIZUR» you can:

- mount EC&I on-site;
- obviate the welding process;
- minimize the mounting time.

### Technical specifications

Material	<ul style="list-style-type: none"> <li>• Carbon steel with polymer powder coating (standard)</li> <li>• Stainless steel AISI 304, AISI 316, 12X18H10T</li> <li>• Different material upon the customer's request</li> </ul>
Climatic category	UHL1
Coating (if required)	<ul style="list-style-type: none"> <li>• Conventional galvanizing</li> <li>• Powder coating</li> <li>• Other types of coating and corrosion coating upon the customer's request</li> </ul>
Coating (if required)	<ul style="list-style-type: none"> <li>• High bearing capacity</li> <li>• Applicability in harsh media</li> </ul>

Supports and stands manufactured by OOO «NPO RIZUR» can be shipped in accordance with the customer's technical specifications and dimensions.

## Vertical pipe stand RIZUR-CVK

Vertical pipe stand RIZUR-CVK is used for the installation of equipment and instrumentation.

Product name	H (height), mm	Ø (diameter), mm
RIZUR-CVK-1800-50	1800	50
RIZUR-CVK-3000-80	3000	80
RIZUR-CVK-XXX-XX	other dimensions - on request	



## Vertical pipe stand with narrowing RIZUR-CVKS

Vertical pipe stand with narrowing is used when there's a need to mount a group of equipment or instrumentation onto one base. Mounting height of the equipment or instrumentation on RIZUR-CVKS stand can be regulated.

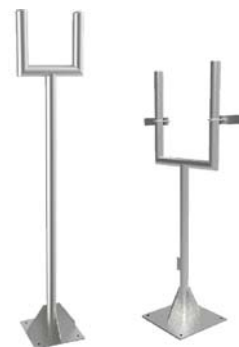
Product name	H (height), mm	Ø (diameter), mm
RIZUR-CVKS-3500-100/50	3500	100/50
RIZUR-CVKS-4500-150/100	4500	150/100
RIZUR-CVKS-XXX-XX/XX	other dimensions - on request	



## Vertical double pipe stand RIZUR-CVKD

RIZUR-CVKD is used for the installation of two pieces of equipment at the same height. It helps to optimize the space the stands take up.

Product name	H (height), mm	Ø (diameter), mm
RIZUR-CVKD-1600-50	1600	50
RIZUR-CVKD-2600-80	2600	80
RIZUR-CVKD-XXX-XX	other dimensions - on request	



## Vertical C-channel stand RIZUR-CShV

Vertical C-channel stand RIZUR-CShV is designed for severe loads. Installation of the equipment or instrumentation is possible both by bolting and welding.

Product name	H (height), mm	C-channel number
RIZUR-CShV-1510-10P	1510	10P
RIZUR-CShV-1610-10P	1610	10P
RIZUR-CShV-XXX-XX	other dimensions - on request	



## Support with wall fastening RIZUR-OKS

Support RIZUR-OKS is designed for the mounting of the measuring equipment to the wall. In the standard version, distance to the wall is 200mm, the length of the mounting seat - 500mm.

Product name	H (height), mm	Ø (diameter), mm
RIZUR-OKS-500-50	500	50
RIZUR-OKSD-700-50 (double)	700	50
RIZUR-OKS-XXX-XX	other dimensions - on request	



## Mounting flange RIZUR-OF

Mounting flange RIZUR-OF is used for the vertical/horizontal installation of a bar. Mounting holes are adapted for the anchorage.

Product name	H (height), mm	Plate thickness, mm
RIZUR-OF-215x140-10	215x140	10
RIZUR-OF-XXXxXXX-XX	other dimensions - on request	



## Adapters

Adapters are used for the connection and vertical erection of supports of various diameters.

Product name	Adapter's size, mm	Extension length, mm
RIZUR-P50x75 (square)	50	75
RIZUR-P50x75 (square) threaded	50	75
RIZUR-P50x200 (square)	50	200
RIZUR-P50x200 (square) threaded	50	200
RIZUR-P50x200 (circle)	50	200
RIZUR-PXXxXXX	other dimensions - on request	





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