

Check Valves

DN 300 - 1000 PN 80, 100, 160

Designed to automatically prevent back flow of working medium, when transmitting non-aggressive natural gas and other non-aggressive media at the temperature ranged -60°C to $+80^{\circ}\text{C}$.

Tightness class per GOST 13252.

Welded end connection (flanged is possible).

Climatic version for areas with temperate and cold climate (-60°C thru $+45^{\circ}\text{C}$).

The average service life before overhaul is no more 40 years.

The Company reserves the right to make design changes to improve it, while minor changes may not be shown in the Catalog.

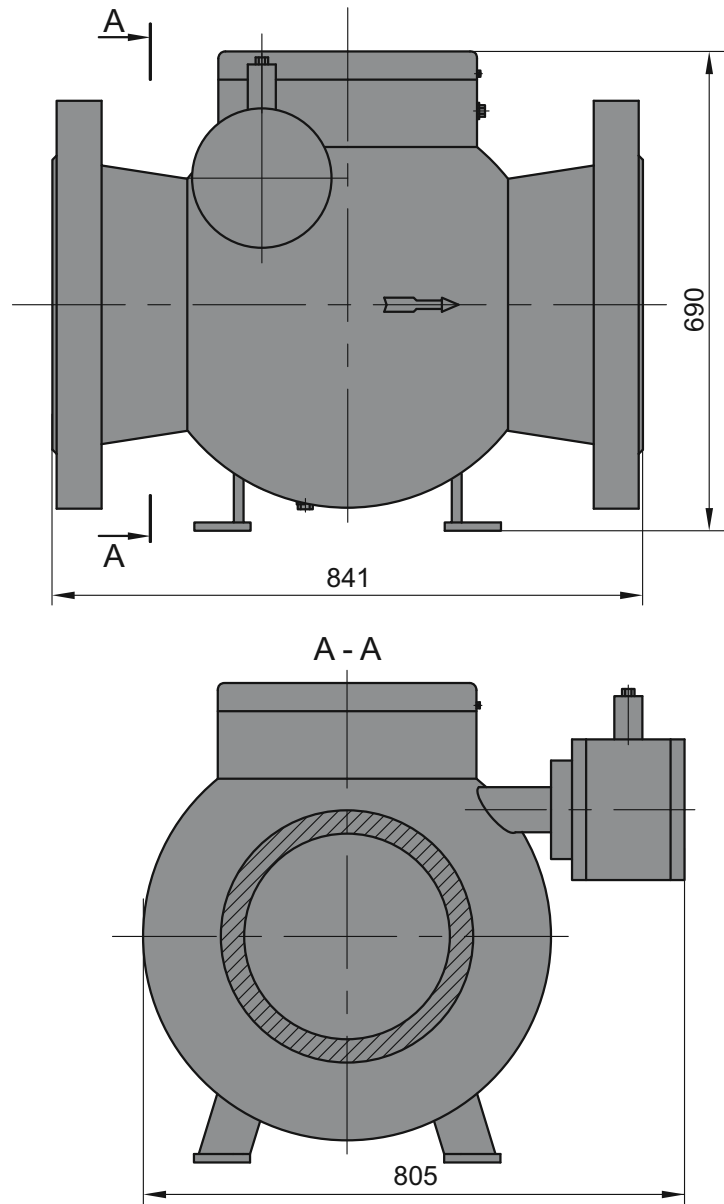


DN 700 PN 80

Design Features:

- Swing type.
- Liquid dampers for DN 300...500 and pneumatic dampers for - DN 700 and over to reduce impact loads.
- One-piece stamped and welded body design.
- High maintainability.
- Low pressure losses.



**Product designation****ZO-300-80-F-F****Figure designation****1.2770.21.200.00-01**

Diameter Nominal, DN, mm

300

Pressure Nominal, PN, MPa

8.0

Connection

Flanged end, with counter flanges, fasteners and sealing parts (WE)*

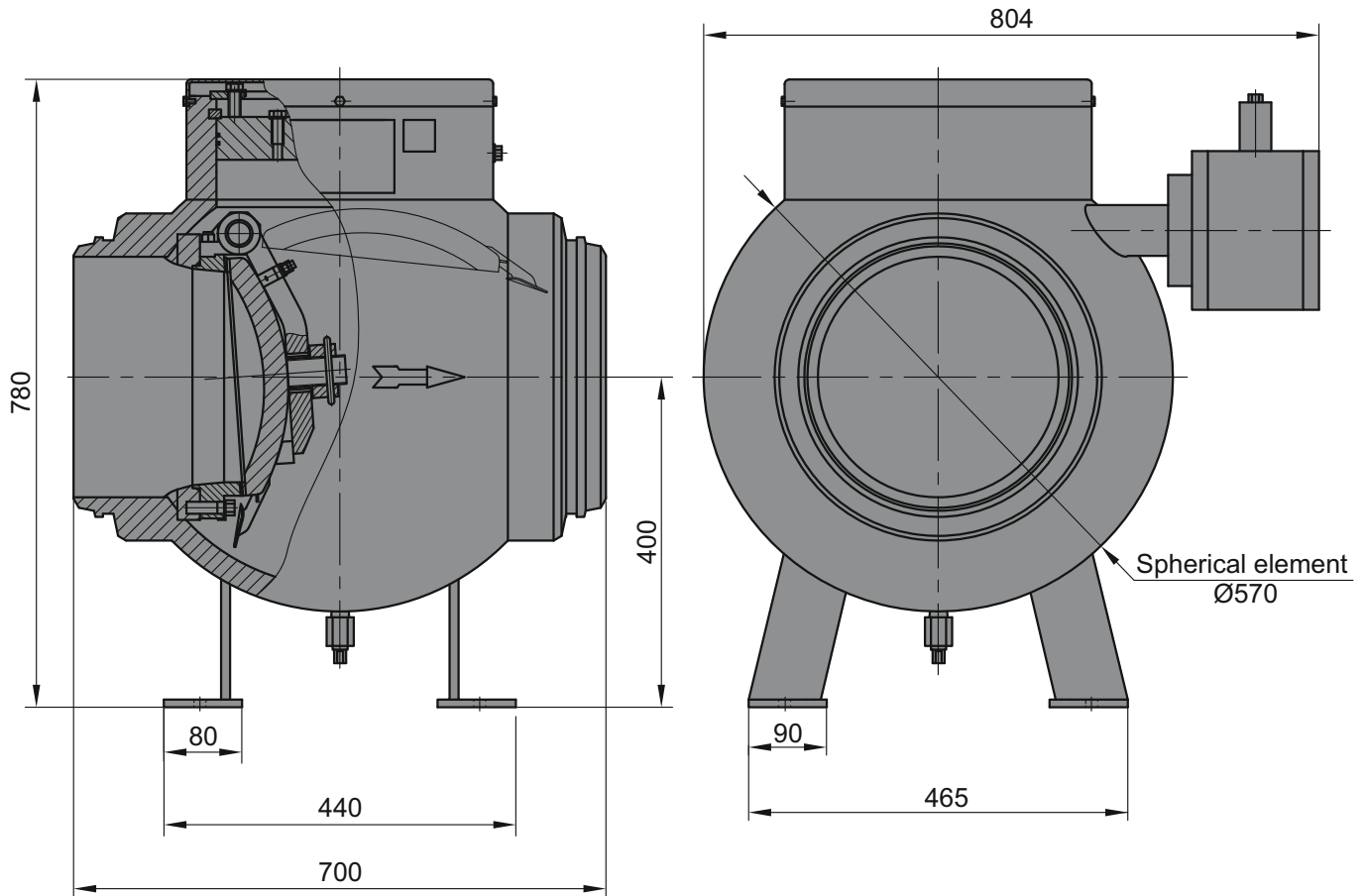
Weight, max, kg

640

Material of main parts

steel 10Г2

* *Pipe is beveled to the pipe specified by a Customer.*

**Product designation****ZO-300-100-Pr****Figure designation****1.2770.56.200.00-01**

Diameter Nominal, DN, mm

300

Pressure Nominal, PN, MPa

10.0

Connection

welded end (WE)*

Weight, max, kg

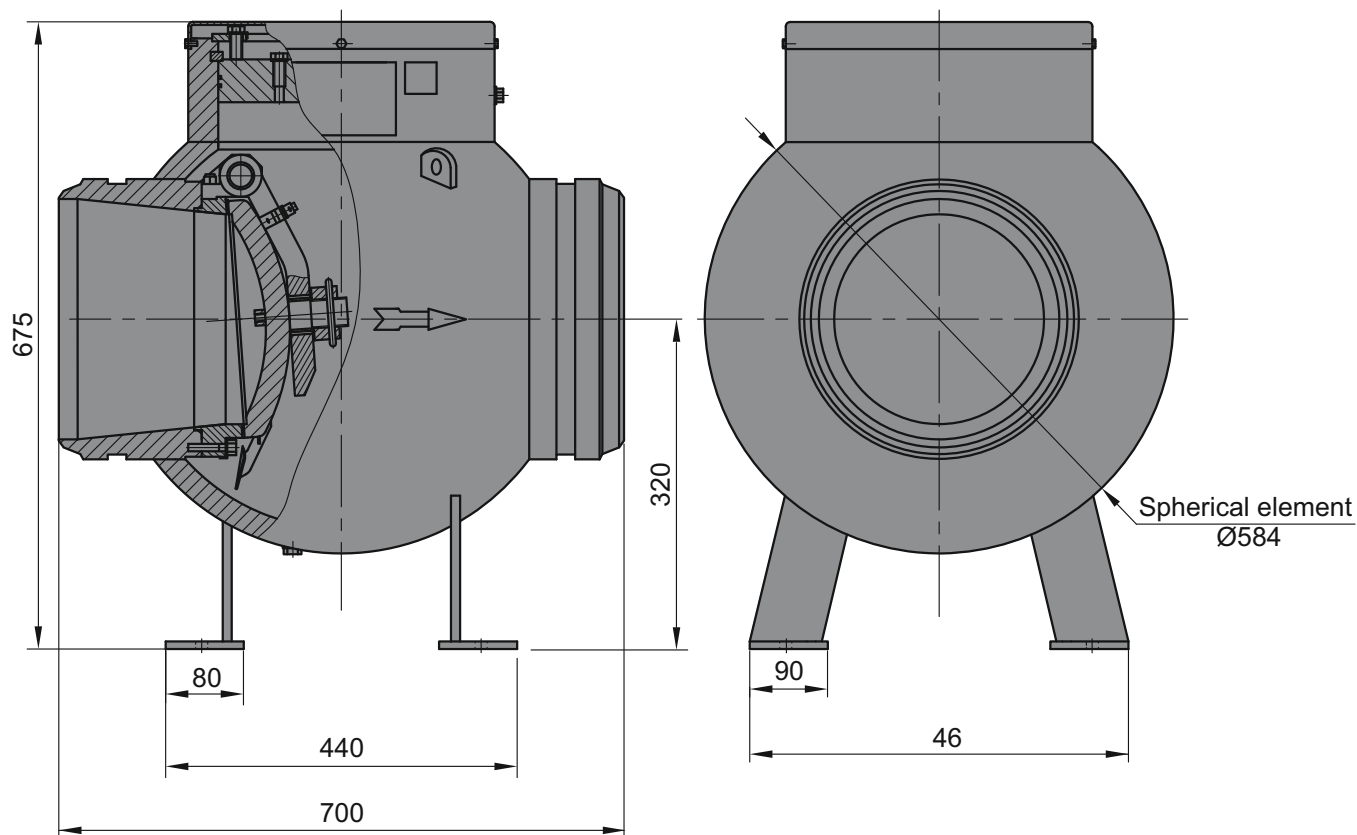
470

Material of main parts

steel 09Г2С

* Pipe is beveled to the pipe specified by a Customer.



**Product designation****ZO-300-160-Pr****Figure designation****1.2770.18.200.00**

Diameter Nominal, DN, mm

300

Pressure Nominal, PN, MPa

16.0

Connection

welded end (WE)*

Weight, max, kg

430

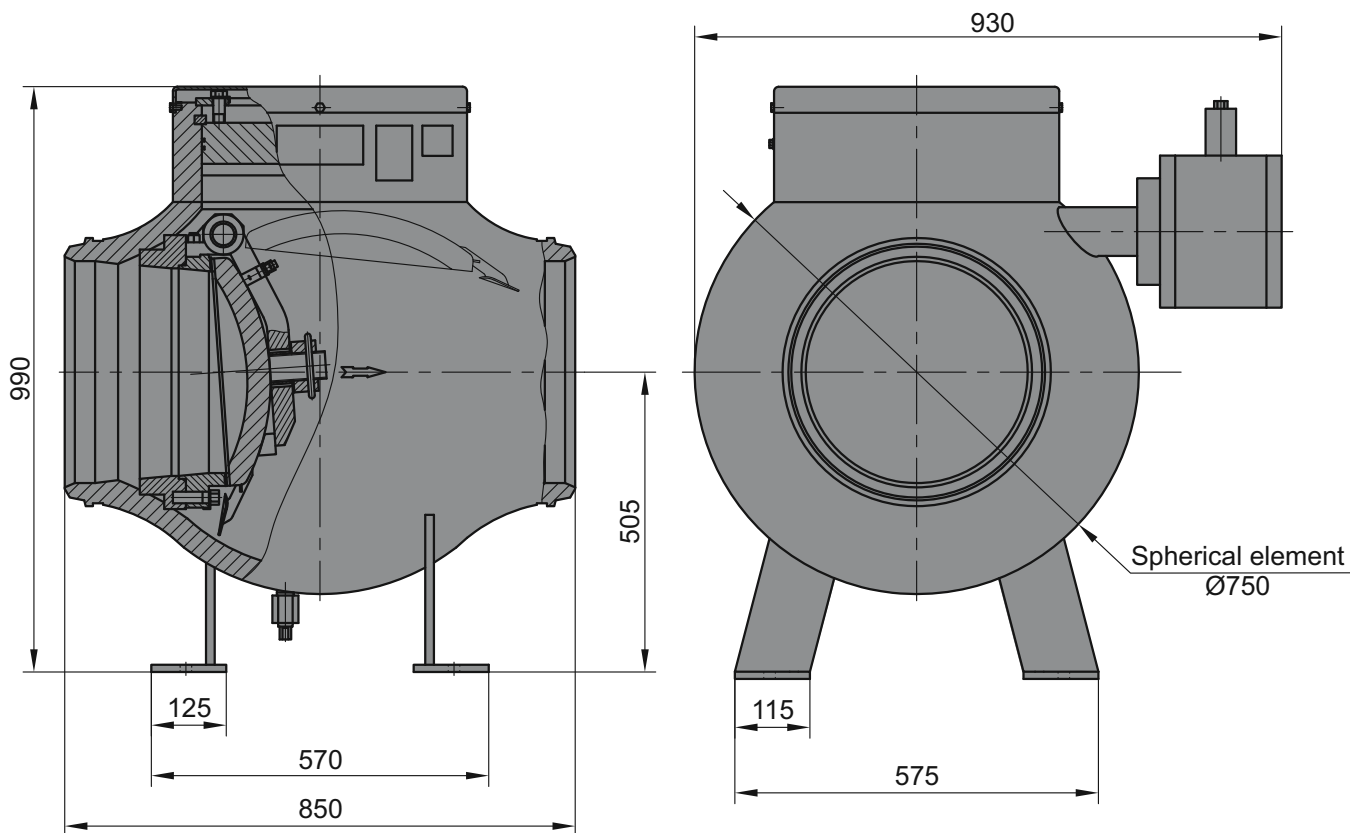
Material of main parts

steel 09Г2С

steel 10Г2

* *Pipe is beveled to the pipe specified by a Customer.*

51 Check Valve DN 400 PN 100



Product designation

ZO-400-100-Pr

Figure designation

1.2770.57.200.00-01

Diameter Nominal, DN, mm

400

Pressure Nominal, PN, MPa

10.0

Connection

welded end (WE)*

Weight, max, kg

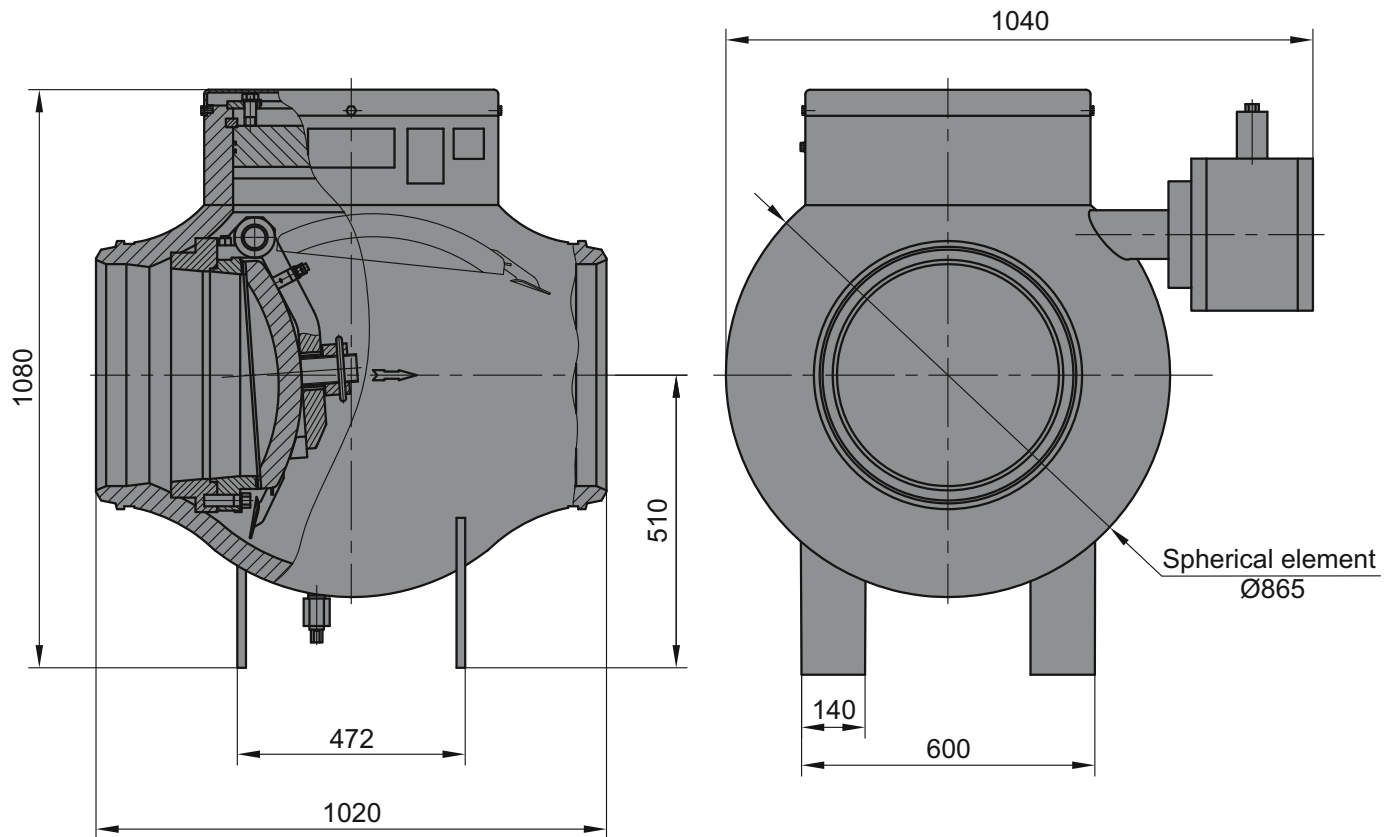
960

Material of main parts

steel 09Г2С

** Pipe is beveled to the pipe specified by a Customer.*



**Product designation****ZO-500-100-Pr****Figure designation****1.2770.55.200.00-01**

Diameter Nominal, DN, mm

500

Pressure Nominal, PN, MPa

10.0

Connection

welded end (WE)*

Weight, max, kg

1170

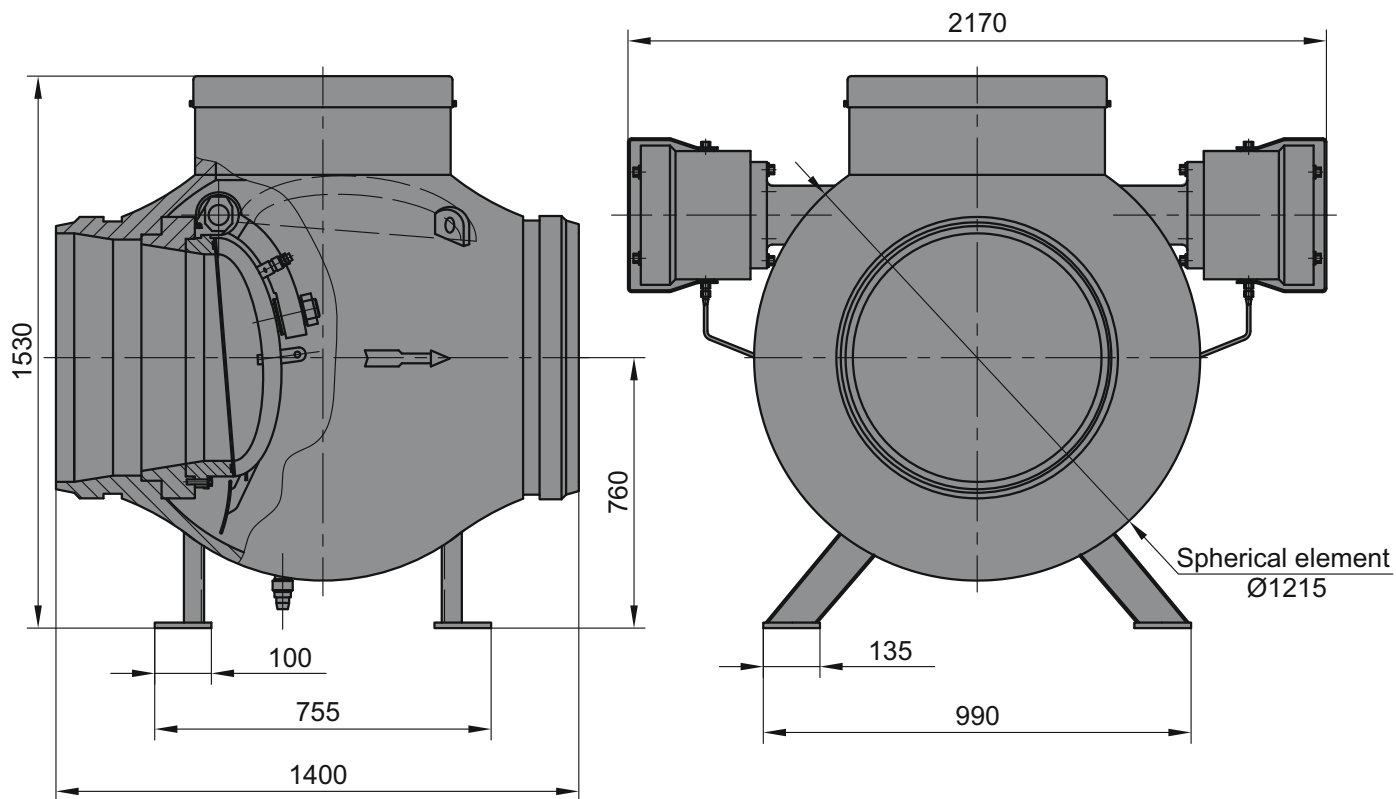
Material of main parts

steel 09Г2С

* Pipe is beveled to the pipe specified by a Customer.



53 Check Valve DN 700 PN 100



Product designation

Figure designation

Diameter Nominal, DN, mm

Pressure Nominal, PN, MPa

Connection

Weight, max, kg

Material of main parts

ZO-700-100-Pr

1.9000.150.00.00-02

700

10.0

welded end (WE)*

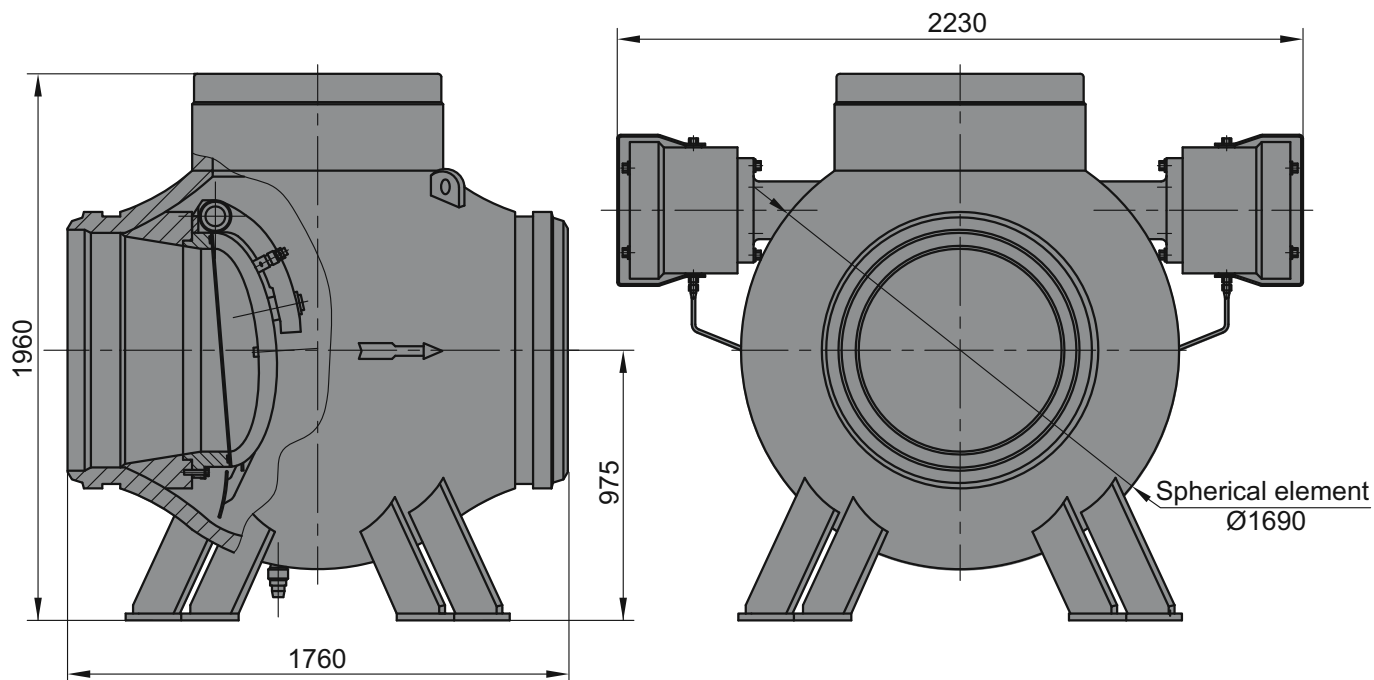
3500

steel 09Г2С

* Pipe is beveled to the pipe specified by a Customer.



54 Check Valve DN 1000 PN 100



Product designation

ZO-1000-100-Pr

Figure designation

1.9000.151.00.00-01

Diameter Nominal, DN, mm

1000

Pressure Nominal, PN, MPa

10.0

Connection

welded end (WE)*

Weight, max, kg

7600

Material of main parts

steel 09Г2С

** Pipe is beveled to the pipe specified by a Customer.*



Sumy NPO	CHECK VALVE	Page 1 from 1
Specification No.	Data Sheet No.	
Date: 20____.____.____	Customer -	
Tel: +38 0542 77-32-29; 24-37-75	Designer - Sumy NPO	
Fax: +38 0542 77-32-28; 22-55-32	Object -	

1	Designation		
	Drawing No.		
2	Quantity	<i>Pcs.</i>	
3	Nominal diameter	<i>DN, mm</i>	
4	Nominal pressure	<i>PN, bar</i>	
5	Pipeline diameter	<i>Outside (mm)</i>	
6	Pipe wall thickness	<i>mm</i>	
7	Pipe material	<i>Steel grade, Standard</i>	
8	Pup carbon equivalent	<i>[C]e, max</i>	
9	Pipeline position	<i>Horizontal /</i>	
10	Installation	<i>Over-ground / under-ground</i>	
11	Connection	<i>Welded end / flanged end</i>	
12	Counter-flanges	<i>yes / no</i>	
13	Working medium		
14	Aggressive components of working medium	<i>mg/m³, max</i>	
15	Mechanical impurities in working medium	<i>g/m³, max</i>	
16	Working medium temperature	<i>°C</i>	
17	Ambient temperature	<i>°C</i>	
18	Work pressure	<i>bar</i>	
19	Max. pressure differential	<i>bar</i>	
20	Working medium velocity (flow rate)	<i>m/sec (nm³/min)</i>	
21	Type	<i>swing</i>	
22	Body type	<i>welded / split</i>	
23	Damper availability	<i>yes / no</i>	
24	Protective covering type	<i>polymer / paint</i>	
25	Paint	<i>color</i>	
26	Additional data:		
	Name	Signature / Date	Tel. / Fax
Designed			
Approved			

When ordering, please specify product and drawing designation.

The example of an order: ZO-300-100-Pr; 1.2770.56.200.00-01.

where

ZO - check valve;
 300 - Diameter Nominal, DN, mm;
 100 - Pressure Nominal, PN, bar;
 Pr - welded end (F-F - flanged connection with counter flanges, fasteners and sealing parts
 Pr – welded end);
 1.2770.56.200.00-01 - drawing designation.

When ordering, please specify dimensions, material and mechanical properties of the pipe to be connected to.

