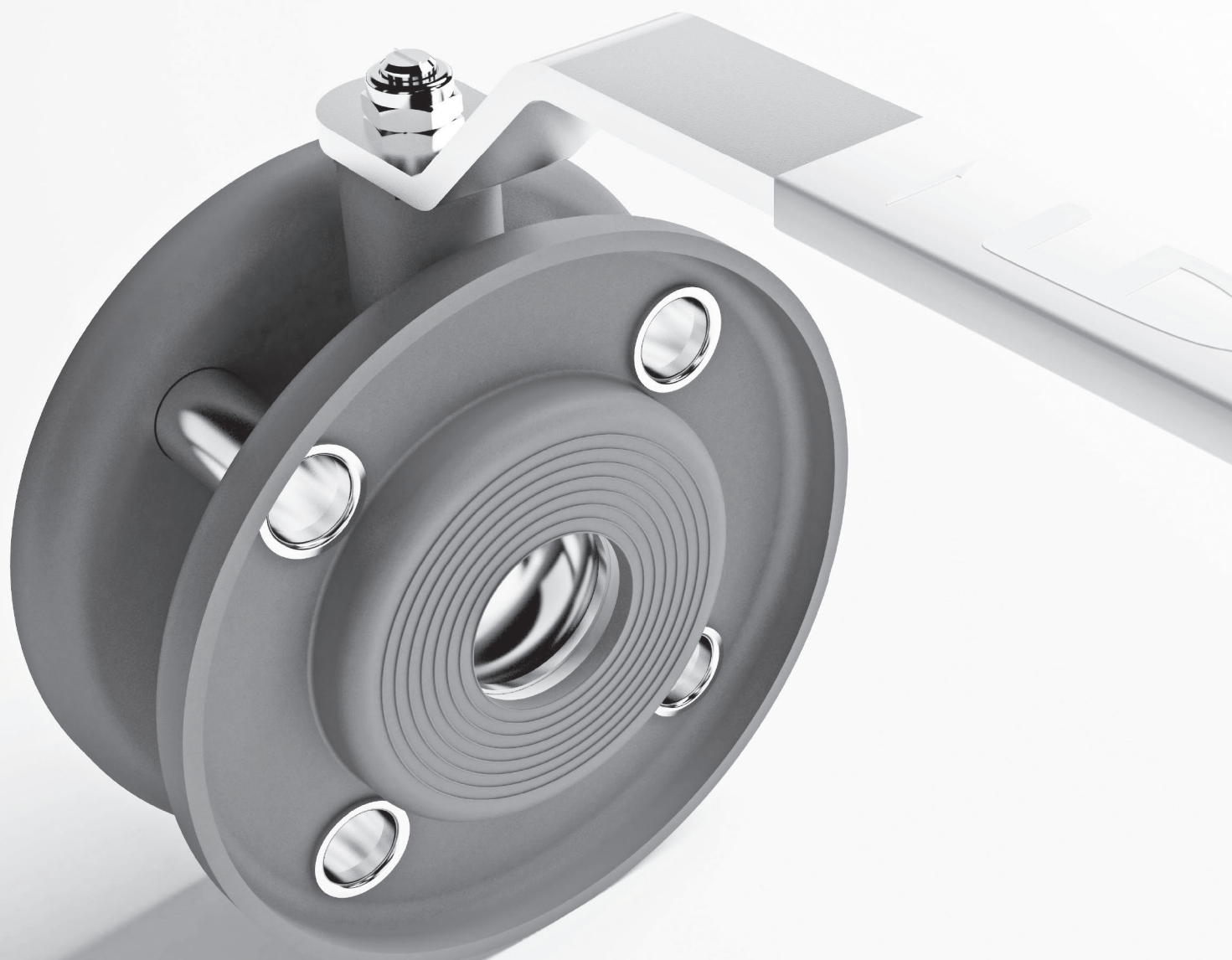


*ZINC PLATED BALL VALVES FOR WATER AND GAS
SUPPLY SYSTEMS, FUEL AND LUBRICANTS*



LD[®] *Swift* 

Certificates



PED 2014/68/EU



ISO 9001-2015

Contents

<i>CERTIFICATES.....</i>	<i>2</i>
<i>ABOUT US.....</i>	<i>4</i>
<i>LD SWIFT SERIES.....</i>	<i>5</i>
<i>MATERIALS OF MAIN PARTS.....</i>	<i>6</i>
<i>INSTALLATION.....</i>	<i>8</i>
<i>OPERATION.....</i>	<i>10</i>
<i>EXPERIENCE.....</i>	<i>11</i>

About us

CHSGS Ltd. - as part of LD GROUP - is a leading Russian manufacturer of steel valves for district heating/cooling, natural gas, petroleum products and chemical industry.



Established in 2002, the plant produces and distributes 1 100 000 items per year.

Today, LD is a famous quality mark recognized not only in Russia and CIS countries but also in Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Finland, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldavia, Mongolia, Poland, Romania, Serbia, Slovakia, Sweden, Ukraine, Uzbekistan.

We comply with all necessary international requirements and standards, such as ISO 9001:2015, PED 2014/68/EU, EN 488. In order to guarantee competitive price and high quality only domestically produced raw materials are used for production of LD ball valves. For timely delivery, warehouses in Saint-Petersburg, Moscow and Novosibirsk are at your convenience and service.

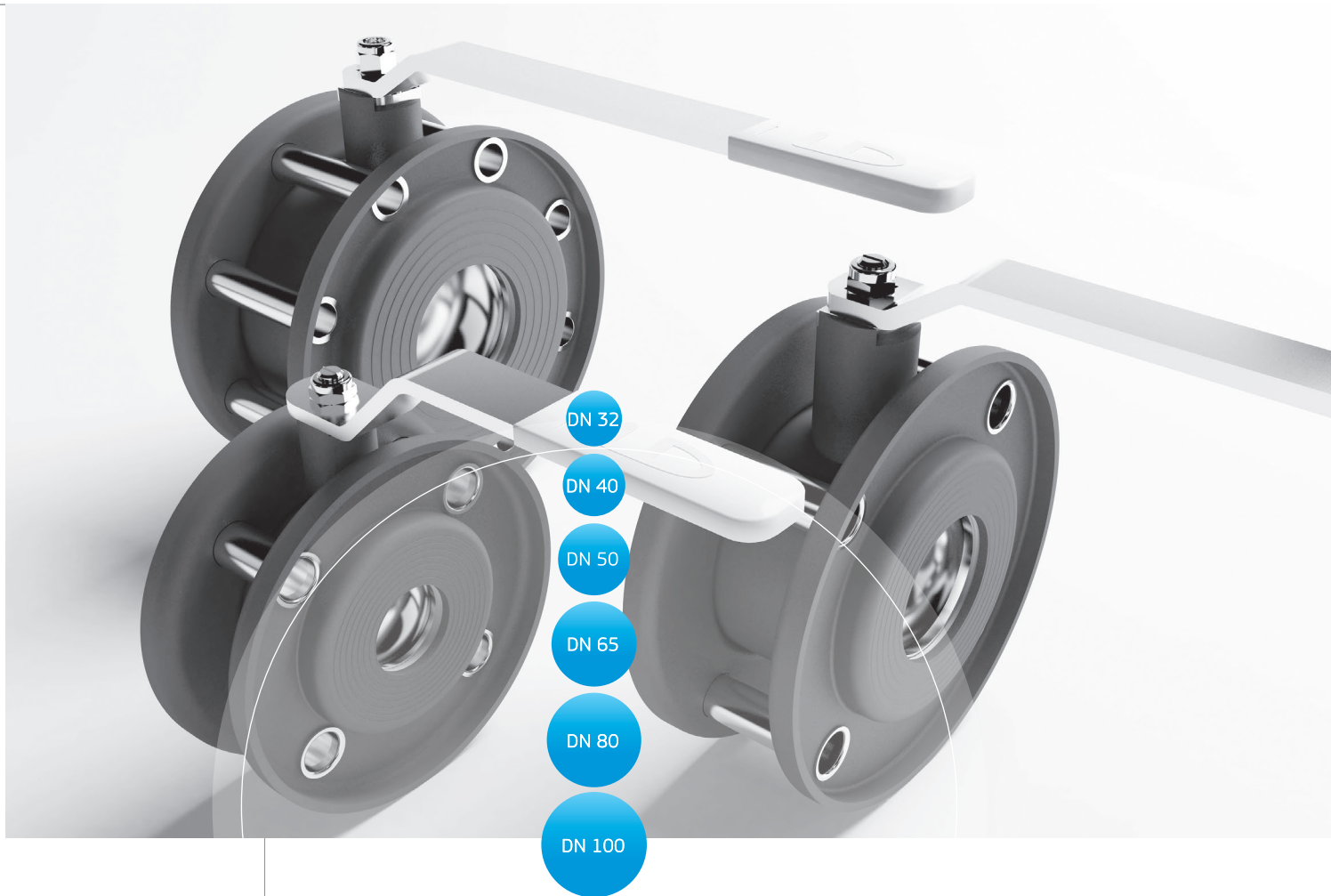


LD SWIFT series valves are designed for application in housing and public utilities, waterworks, heat supply systems, plumbing and heating installations, cold/hot water supply, gas-supply, block-modular boiler houses, gas distribution plants.

Materials:

- LD SWIFT ball valves made of carbon steel (Steel 20, 1.1151), climate class N
- LD SWIFT ball valves made of alloy steel (09G2S), climate class NF
- LD SWIFT ball valves made of stainless steel (AISI321, 1.4541), climate class NF

LD SWIFT series



DN 32 – 100, PN up to 16 bars

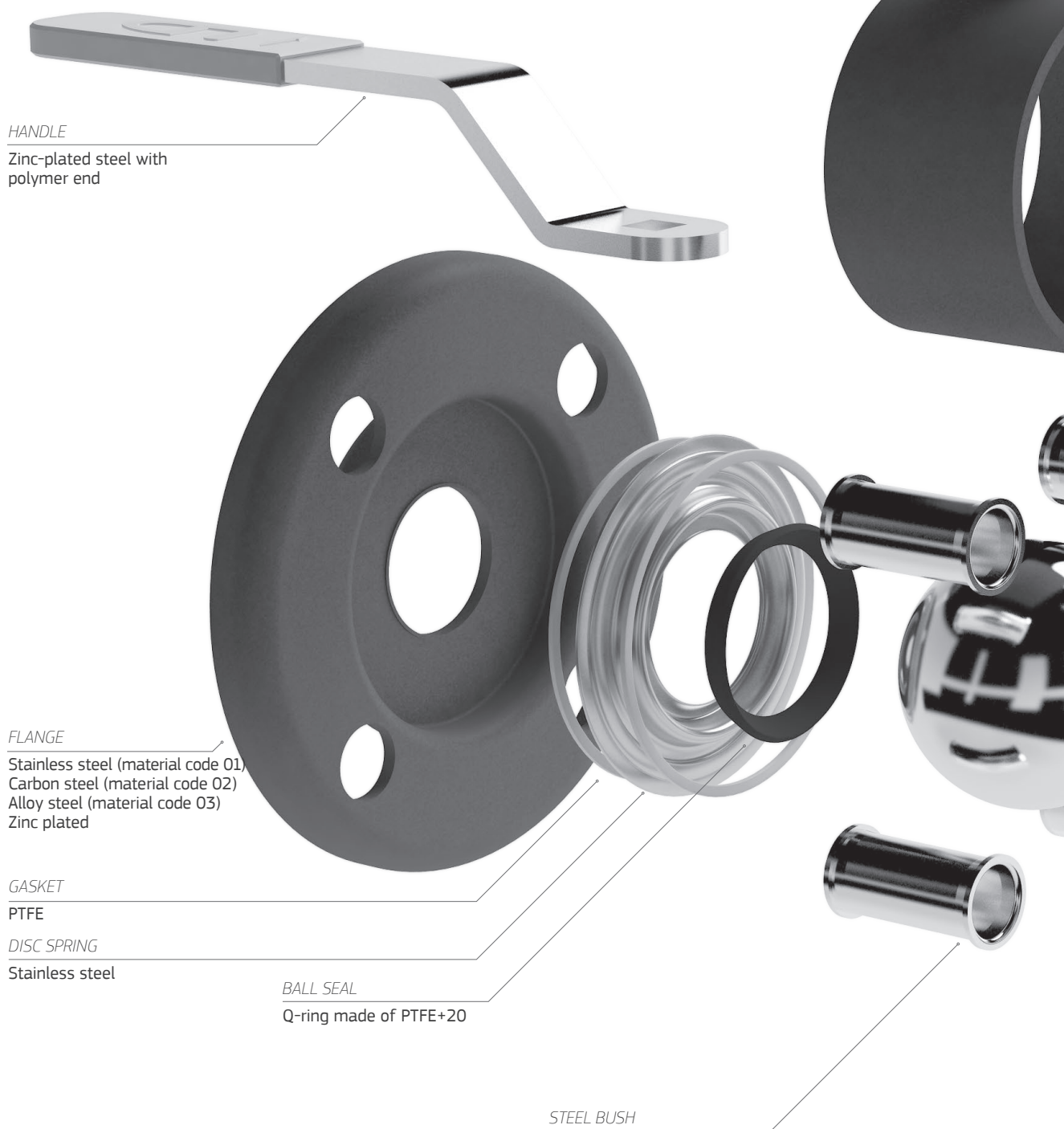
Working medium temperature:
-40°C (-60°C) to +150°C bars

Tightness A rate according to EN12266-1

IDENTIFICATION MARK

Ball valve	LD SWIFT	XXX.	XXX.	XX.	XX.	XX
Name	LD SWIFT					
Nominal diameter		DN				
Nominal pressure· kgf/cm ²			PN			
Bore						Reduced bore-9 Full bore – no marking
Material code					01, 02, 03	
Corrosion-resistance coating						Zn*

Materials of main parts (Material code 02)



STEM SHELL

Stainless steel (Mat. code 1)
Carbon steel (Mat. code 2)
Alloy steel (Mat. code 3)
Zinc plated

BODY

Stainless steel (Mat. code 1)
Carbon steel (Mat. code 2)
Alloy steel (Mat. code 3)
Zinc plated

NUT

Carbon steel
With nylon seal

RETAINING RING

Zinc plated spring steel

LIMITING WASHER

Zinc-plated steel

STEM SEALING RING

FVMQ

WASHER

PTFE

STEM

Stainless steel
AISI 321 (Mat. code 1)
AISI 420 (Mat. code 2, 3)

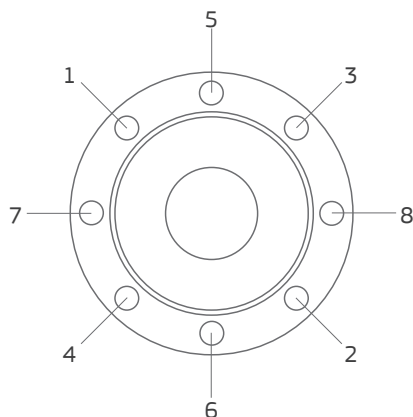
BALL

Stainless steel
AISI 321, AISI 304 (Mat. code 1)
AISI 304, AISI 409 (Mat. code 2, 3)

Installation

1. Valves can be installed on pipelines in any position providing ease of use and access to manual actuator.
2. During installation valve shall be fully opened.
3. Before the valve's installation, pipeline shall be cleared from dirt, sand, slag etc.
4. Need to fix the flanges on pipeline using beam clamp and should be maintain parallelism of mating flanges and alignment of main pipeline.
5. Need to tack with welding the flanges with pipeline four-point, after that demount valve, and weld acc. GOST 16037.
6. The installation of the ball valve is necessary to carry out inspection of the flanges sealing faces. On the flange should be no surface defects.
7. Installation of the valve shall be performed according to GOST 12.2.063 item 9.6. You can tight studs using sealing material after cooling procedure for flanges (not above 50°C).
8. Installation and tightness of fixing studs should be carried out using torque wrench according with drawing and enclosed table of tightening force (pic. 1)
9. Parallelism of pipe and valve flanges sealing faces within a tolerance of 0.2 mm is acceptable.
10. It is forbidden to eliminate distortions of the pipeline flanges due to the tightness of the fastening studs. During the press-fitting works of the main pipeline it is necessary to test ball valve using "soap solution bubble test" for tightness of the attachment sites of the valve to pipeline in case of possible deformation from pipeline. If there is a leakiness of ball valve prefabricated compounds it is necessary to tight of mounting studs (crosswise) (see pic. 1).
11. Maximal amplitude of the pipelines vibrational displacement is no more than 0,25mm.
12. In order to avoid pressure shock in the pipeline, open and close the valve smoothly.
13. During installation and operation of the valve safety requirements shall be fulfilled in accordance with GOST 12.2.063
14. During lifting and/or transportation of valves it is prohibited to fasten and/or to grip the handle.
15. During dismantling the flange compounds it is necessary to release in reverse sequence.

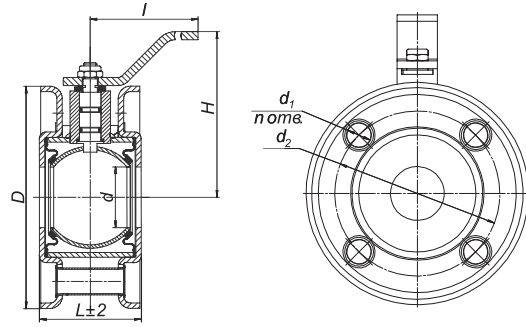
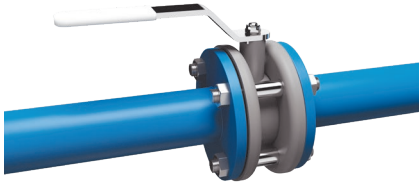
Fig. 1



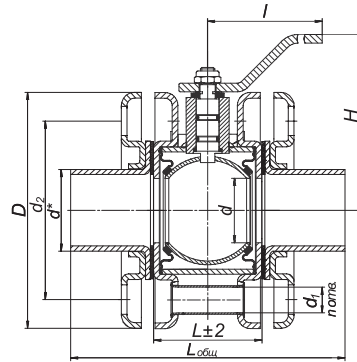
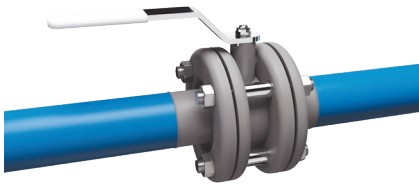
DN 32 PN16	70 - 120 Nm
DN 40 PN16	70 - 120 Nm
DN 50 PN16	70 - 120 Nm
DN 65 PN16	70 - 120 Nm
DN 80 PN16	70 - 120 Nm
DN 100 PN16	70 - 120 Nm

Exceeding the maximum allowable torque can cause valve damage

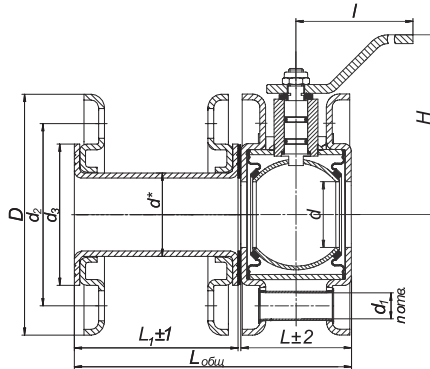
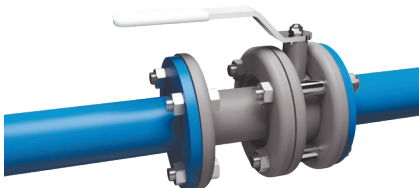
INSTALLATION



VALVE WITH ASSEMBLY SET



VALVE WITH EXTENSION UNIT



INSTALLATION ACCESSORIES

Flange	2 pcs.
Gasket	2 pcs.
Stud	4/8 pcs.*
Nut	8/12/16/20 pcs.*
Bolts	4/8 pcs.*

Dn	D	d	d1	d2	n	L	l	H	L1	Lgen	Weight, kg
32	134	30	17	100	4	52	220	105	86	140	1,7
40	150	40		110		67		116	96	165	2,5
50	165	45		125		75		123	103	180	3
65	180	63		145		92		156	106	200	4,7
80	200,5	63		160	8	92	315	156	116	210	5
100	215	75		180		110		165	118	230	7

*Depending on diameter and installation method

Operation



LD SWIFT series valves are used for transportation of the following working mediums: drinking water, industrial water, natural gas and other mediums in relation to which valve materials are corrosion resistance.

Valves are intended for use both in existing systems as an alternative for cast iron gate valves and butterfly valves, and the design and construction of new pipelines. Design of ball valve provides hardness and tightness A rate at temperature range -40°C to $+150^{\circ}\text{C}$ (Mat. code 02), -60°C to $+150^{\circ}\text{C}$ (Mat. code 01, 03).

Ball valves are ready for operation, don't need a service throughout operation. Valves may be installed on pipelines in any position. With a view of prophylaxis it is necessary to make "activate-close" cycles 2 times a year.

Ball valves are processed through full testing, subject to 100% control under PED 2014/68/EU using modern equipment



- ✓ Corrosion-resistant materials
- ✓ Do not required maintenance
- ✓ Valves may be installed on pipelines in any position.
- ✓ Light weight and small size
- ✓ Stable torque on the whole open-to-close travel

Experience



HEATING SUBSTATION



RUSSIA

LD GROUP

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YOUR PERSONAL MANAGER