

Valves programme















Established in 1946

Product range: stop valves, bellow valves, check valves, strainers, butterfly valves, ball valves, backflow preventers, rubber expansion joints, gate valves, castings.

Application: heating plants and systems, air conditioning and ventilation, water and sewage plants, shipbuilding.



Established in 1982

Product range: the engineering, specification and integration of industrial automation; service, maintenance and upgrade of natural gas distribution equipment; natural gas leaks detection in high-pressure equipment, sales and maintenance of material handling equipment.

Application: gas industry, energy industry, aviation industry, water and sewage plants, dairy industry, sugar plants, paper mills, cobblestone industry.



Established in 1985

Product range: car parts, mechanical parts for vacuum pumps, servo drive parts, parts for construction and agricultural machinery, hydraulic units, high pressure hydraulic pumps.

Application: automotive, construction, agriculture.



Established in 2014

Product range: advanced engineering services for the implementation of the research and development of industrial valves (valves research, development and implementation of new products, design and technological work).

Application: industrial valves, regulation systems.



Established in 2009

Product range: exhaust systems, metal components. **Application:** automotive industry, construction industry, agriculture, forestry.



Established in 1772

Product range: forgings.

Application: automotive, mining, construction, energy and agriculture.



Established in 1832

Product range: bolts, nuts, washers, rivets.

Application: construction industry, railway industry, engineering industry, mining industry, automotive industry.



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VALVE APPLICATION



Industry



Shipbuilding industry



Heating



straight



angle





Power engineering



Petrochemical industry



Refrigeration and Air Conditioning



FORM



wafer type



lug type



Fire protection systems



flanged

threaded



grooved ends



welded ends



Drinking water



Sewage



Gas



horizontal



vertical

vertical/ horizontal





Glycol



Industrial water











Steam



Compressed air

OPERATION



gear box

bare shaft



hydraulic / pneumatic actuator



manual operation



Dry materials

electric actuator

BASIC TYPES OF ACTUATORS



PSL



Regada



Belimo



Auma



Zetkama



Legend

Body material acc. to index

A - Grey cast iron EN-GJL-250 5.1301 (ex. JL 1040)

B - Nodular cast iron EN-GJS-400-15 5.3106 (ex. JS 1030)

Nodular cast iron EN-GJS-400-18-LT 5.3103 (ex. JS 1025)

D - Nodular cast iron EN-GJS-500-7 5.3200 (ex. JS 1050)

E - Bronze CuSn5Zn5Pb5-C CC491K

F - Cast steel GP240GH 1.0619

G - Carbon steel P355NH 1.0565

H - Brass CuZn36Pb2As CW602N

Cast stainless steel GX5CrNiMo19-11-2 1.4408

J - Aluminum EN-AC 44100 G-AlSi12

L - EPDM

Acid resistant steel X6CrNiTi18-10 1.4541

N - Carbon steel S235JRG2 1.0038

O - Carbon steel S275JR 1.0044

R - Acid resistant steel GX5CrNi19-10 1.4308

P - Stainless steel X20Cr13 1.4021

Stainless steel X5CrNi18-10 1.4301

T - Brass CuZn39Pb2 CW612N

V - Brass CuZn40Pb2 CW617N

X - Composite PPS

Nominal pressure

J - 2,5 bar

A - 6 bar

B - 10 bar

C - 16 bar

D - 25 bar

E - 40 bar

F - 63 bar

G - 100 bar



STOP VALVES zGLO

figure 201



Stop valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	10-50	16	С	-10+200

Ends Working positions Form

*











Application









STOP VALVES zGLO

figure 215



NOTE: available types: SDNR, with throttling disc, with balancing disc, with control disc (equal percentage flow characteristic)

Stop valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	INAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	℃
grey cast iron EN-GJL-250	А	15-200	6	А	-10+300
5. 1301	,	15-300	16	C	101300
nodular cast iron EN-GJS-400-18-LT	C	15-200	16	С	-10+350
5.3103	J	15-200	25	D	-10+330
bronze		15-125	16	С	
CuSn5ZnPb5-C CC491K	E	150-200	10	В	-10+225
		250-300	6	Α	
cast steel GP240GH 1.0619	F	15-200	40	E	-20+400
cast stainless steel GX5CrNiMo 19-11-2 1.4408	_	15-200	40	E	-60…+400

Ends 0

Form

Working positions















*



6



STOP VALVES zGLO

figure 216



NOTE: available types: SDNR, with throttling disc, with balancing disc, with control disc (equal percentage flow characteristic)

Stop valve

BODY MATERIAL			NOMINAL NOMINAL DIAMETER PRESSURE DN PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	Α	15-200	6	Α	-10+300
5. 1301	۸	15-300	16	С	-10+300
nodular cast iron EN-GJS-400-18-LT	C	15-200	16	С	-10+350
5. 3103	,	15-80	25	D	-10+350
bronze		15-125	16	С	
CuSn5ZnPb5-C	Е	150-300	10	В	-10+225
CC491K		250-300	6	Α	

Ends **Working positions** Operation













Application



Not all of the applications are suitable for all of the executions.

STOP VALVES zGLO

figure 217



NOTE: available types: SDNR, with throttling disc, with balancing disc, with control disc (equal percentage flow characteristic)

Stop valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
cast steel GP240GH 1.0619	F	15-100	40	E	-20+450
cast stainless steel GX5CrNiMo 19-11-2 1.4408	_	15-100	40	E	-60+400

Working positions *

Application















BELLOW VALVES zBEL

figure 234



NOTE: available types: with throttling disc, with balancing disc, with control disc (equal percentage

Bellow valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	A	15-250	16	C	-10+300
nodular cast iron EN-GJS-400-18-LT	С	15-200	16	С	-10+350
5. 3103	J	15-200	25	D	-10+330
cast steel GP240GH 1.0619	F	15-150	40	E	-20+400
caststainless steel GX5CrNiMo19-11-2 1.4408	-	15-200	40	E	-60…+400

Ends Form Working positions Operation

























Not all of the applications are suitable for all of the executions.

BELLOW VALVES zBEL

figure 235



NOTE: available types: with throttling disc, with balancing disc, with control disc (equal percentage flow characteristic)

Bellow valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	Α	15-250	16	С	-10+300
nodular cast iron EN-GJS-400-18-LT	С	15-200	16	С	-10+350
5. 3103		15-80	25	D	-10∓330

Ends Form

Working positions Operation



Application

















BELLOW VALVES zBEL

figure 237



NOTE: available types: with throttling disc, with balancing disc, with control disc (equal percentage flow characteristic)

Bellow valves

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
cast steel GP240GH 1.0619	F	15-100	40	Е	-20+450
cast stainless steel GX5CrNiMo 19-11-2 1.4408	I	15-100	40	E	-60+400

Working positions Ends Form *





Not all of the applications are suitable for all of the executions.

CONTROL VALVES zCON

figure 227



Control valve with actuator

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron	٨	15.00	16	(-10+150
EN-GJL-250 5. 1301	Α	15-80	16	С	-10+200

Ends Form Working positions Operation



















CONTROL VALVES zCON

figure 223



Pressure regulating valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
brass CuZn36Pb2As CW602N	Н	15-50	16	С	-10+120

Ends

Working positions Operation Form











Application







CONTROL VALVES zCON

figure 224



Pressure regulating valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	65-150	16	С	-10+120

Ends

Form Working positions





Operation



Application



0









CONTROL VALVES **zCON**

figure 236



Bellow control valve with actuator and positioner

BODY MATERIAL		NOMINAL DIAMETER DN		INAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	A	15-150	16	С	-10+300
nodular cast iron EN-GJS-400-18-LT	С	15-150	16	С	-10+350
5. 3103	C	15-150	25	D	-10+330
cast steel GP240GH 1.0619	F	15-150	40	E	-20+400

Ends Working positions Operation 0 Application

CHECK VALVES zCHE

figure 275



Disc check valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	INAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
brass CuZn36Pb2As CW602N	Н	15-100	16	С	-10+200
cast stainless steel GX5CrNi-Mo19-11-2 1.4408	I	15-300	40	E	-10+300

Ends **Working positions** *







CHECK VALVES zCHE

figure 277



^{*} type without spring only in horizontal positions

Globe check valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	15-50	16	С	-10+200

Ends Form Working positions *







Application



figure 287



^{*} type without spring only in horizontal positions

Globe check valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE	
grade	index	mm	bar	index	°C	
grey cast iron EN-GJL-250 5. 1301	А	15-300	16	С	-10+300	
nodular cast iron EN-GJS-400-18-LT	C	15-200	16	С	-10+350	
5. 3103		,	15-200	25	D	-10+330
bronze		15-125	16	С		
CuSn5ZnPb5-C	Е	150-200	10	В	- 10+225	
CC491K	CC491K	250-300	6	Α		
cast steel GP240GH 1.0619	F	15-150	40	E	-20+400	

Ends Form Working positions*











CHECK VALVES ZCHE



CHECK VALVES zCHE

figure 288



 $[\]ensuremath{^*}$ type without spring only in horizontal positions

Globe check valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	15-300	16	С	-10+300
nodular cast iron EN-GJS-400-18-LT	0	15-200	16	С	-10+350
5. 3103	J	15-80	25	D	101330
bronze CuSn5ZnPb5-C		15-125	16	С	
	Е	150-200	10	В	- 10+225
CC491K		250-300	6	Α	

Ends Working positions*

0





Application



Not all of the applications are suitable for all of the executions.

CHECK VALVES zCHE

figure 302



*flow vertically from the bottom

Swing check valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	40-300	16	С	-10+300

Working positions * Ends

0











CHECK VALVES zCHE

figure 400



^{*} flow vertically from the bottom

Ball check valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
nodular cast iron EN-GJS-500-7	D	50-150	16	С	-10+70
5.3200	D .	200-500	10	В	-10+70

Ends Form Working positions *







Application



CHECK VALVES zCHE

figure 401



^{*} flow vertically from the bottom

Ball check valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
nodular cast iron EN-GJS-500-7 5.3200	D	25-80	16	С	-10+70

Ends Form Working positions *













CHECK VALVES zCHE

figure 402



Check valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	Α	50-200	16	С	10
5. 1301	А	250-300	10	В	-10+80

Ends Working positions 0

Application



CHECK VALVES zCHE

figure 408



Check valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	٨	50-200	16	С	-10+70
5. 1301	А	250-300	10	В	-10+70

Ends Form Working positions











CHECK VALVES zCHE

figure 407



Dualplate check valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	^	40-200	16	С	-10+100
5. 1301	Α	250-350	10	В	-10+100
stainless steel steel		40-300	16	С	20 + 100
GX5CrNiMo19-11-2 1.4408	'	350-600	10	В	-20+100

Ends Working positions Form







Application







STRAINERS zSTRA

figure 821



^{*} cover downward

Strainer

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	^	15-200	6	Α	-10+300
5. 1301	Α	15-400	16	С	-10+300
nodular cast iron EN-GJS-400-18-LT	C	15-200	16	С	-10+350
5. 3103	C	15-200	25	D	-10+330
nodular cast iron EN-GJS-500-7	D	15-200	16	С	-10+350
5. 3200	D	15-200	25	D	-10+330
cast steel GP240GH 1.0619	F	15-200	40	E	-20+400

Ends Working positions * Form







Application





STRAINERS zSTRA

figure 823



* cover downward

Strainer

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	℃
grey cast iron EN-GJL-250 5. 1301	А	10-80	16	С	-10+200

Ends Form Working positions *





















SCREENS

SCREEN	ТҮРЕ	DN	MESH	MESHES SCREEN	PERFORMANCE			
	F45	10-50	1,00	45	50			
Standard	F28	65-80	1,25	28	49			
	F15 100-400 1,60 15							
Other types	screens	screens F100 (0,6), F200 (0,5), F300 (0,4), F400 (0,32) F600 (0,25)						

NOTE: type with magnetic cartridge on client's request



BALL VALVES zBAL

figure 565



Ball valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	Α	15-200	16	С	-10+150
5. 1301	А	250	10	В	-10+100
nodular cast iron EN-GJS-400-15 5. 3106	В	15-200	16	С	-10+100

Ends Working positions *

{∰}

Operation



Application











BACKFLOW PREVENTERS

zBAC

figure 405



* no available DN 125

Backflow preventer BA

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	65-150*	10	В	0+65

Ends Form Working positions

0



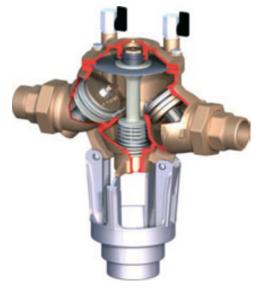






BACKFLOW PREVENTERS

figure 406



Backflow preventer BA

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
brass CuZn36Pb2As CW602N	Н	15	10	В	0+65
bronze CuSn5ZnPb5-C CC491K	E	20-50	10	В	0+65

Application



BALANCING VALVES ZSTA

figure 221



Static balancing valve

BODY MATERIAL				IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
brass CuZn36Pb2As CW602N	Н	15-50	25	D	-10+120
sampasita DDC	V	15-20	16	С	10 . 120
composite PPS	Х	25-32	10	В	-10+120

Ends Form Working positions Operation



















BALANCING VALVES zSTA

figure 447



Static balancing valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	40-300	16	С	-10+120

*

Operation

 $\{ \mathfrak{B} \}$



DIGITAL MEASURING DEVICE

Available flow measuring devices for balancing instalation.



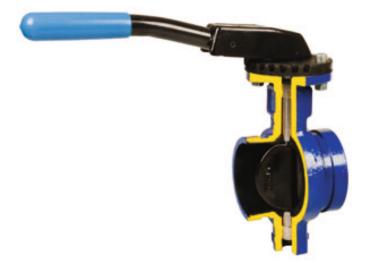






BUTTERFLY VALVES zBUT

figure 494



Butterfly valve with grooved ends

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		MAXIMUM TEMPERATURE
grade	index	mm	bar	index	°C
nodular cast iron EN-GJS-400-15 5. 3106	В	50-200	16	С	max. +110

Form Working positions Operation Ends

Application

0

*





BUTTERFLY VALVES

zBUT

figure 495



Wafer butterfly valve with vulcanized seat

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	MAXIMUM TEMPERATURE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	Α	40-150	16	С	
5. 1301	A	200-250	10	В	440
nodular cast iron		40-150	16	С	max. +110
EN-GJS-400-15 5. 3106	В	200-250	10	В	

Ends Working positions Operation















Application











BUTTERFLY VALVES zBUT

figure 496



Wafer butterfly valve with aluminum body

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		MAXIMUM TEMPERATURE
grade	index	mm	bar	index	℃
aluminum EN-AC 44100		50-100	10	В	max. +95
G-AlSi12	J	125-200	6	Α	111ax. +95

Ends Working positions Operation

*



Application



BUTTERFLY VALVES zBUT

figure 497



Wafer butterfly valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250	А	25-150	16	С	-60+210
5. 1301		200-1200	10	В	-00+210
nodular cast iron EN-GJS-400-15	В	25-300	16	С	-60+210
5. 3106	В	350-1200	10	В	-60+210

Working positions Operation Ends















Application

















BUTTERFLY VALVES ZBUT

figure 498



Wafer butterfly valve LUG type

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	℃
grey cast iron EN-GJL-250	Α	25-150	16	С	-60+210
5. 1301	А	200-600	10	В	-00+210
nodular cast iron EN-GJS-400-15	В	25-150	16	С	-60+210
5. 3106	В	200-600	10	В	-00+210

Ends Form Working positions Operation

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Application



Not all of the applications are suitable for all of the executions.

BUTTERFLY VALVES ZBUT

figure 499



Double flanged butterfly valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	A	150-1600	10	В	-40+210
nodular cast iron EN-GJS-400-15	В	150-900	16	С	-40+210
5. 3106	В	1000-1600	10	В	-40+210

Application





SEAT MATERIALS

APPLICATIONS	MATERIAL	RANGETEM	PERATURES	DESIGNATION ISO 1629	CODE
water / sea water / weak acids and basis	ethylene propylene	- 40°C	+ 110°C	EPDM	ECO
heating without steam water	ethylene propylene high temperature	+ 80°C	+ 130°C	EPDM	НТ
nourishing products	nitrile hydrogenated	-10°C	+ 90°C	NBR	N
abrasive powdered products	flucast AB / P	-10°C	+ 90°C	-	AP
oxygenated solvents ketones esters with abrasion	flucast AB / E	- 20°C	+ 95°C	-	AE
mineral or vegetables oils and greases abrasives	flucast AB / N	-10°C	+ 100°C	-	AN
air and hot water without steam hight and low temperatures	silicone	- 60°C	+ 200°C	MVQ	S
nourishing and milky products	food silicone	- 60°C	+ 200°C	MVQ	SA
low pressure steam water	steam silicone	- 60°C	+140°C	MVQ	SV
acids / high temperature	viton	-15°C	+ 210°C	FPM	V
biodiesel / acids / steam water	viton-biodiesel	- 5°C	+ 210°C	FPM	V
oxygened gasoline	viton-GF gasoline	- 5°C	+ 210°C	FPM	V
water / diluted bases diluted non oxidation acids	hypalon	-25°C	+ 120°C	CSM	Н
brine systems, low temperature and resistance to gas oil and fuel	epichlorohydrin	- 40°C	+ 125℃	ECO	ECO
sea water	neoprene	- 25°C	+ 80°C	CR	NP
low permeability to inert gases: nitrogen, air, oxygen	butyl	- 10°C	+ 95°C	IIR	В

DISC MATERIALS

APPLICATIONS	MATERIAL	STANDARD	CHARACTERISTICS	CODE
chemical and nourishing products	stainless steel	A 351 Gr. CF8 (AISI 304)	very good chemical and corrosion resistance	1
demineralized water, chemical products, nourishing products	stainless steel	A 351 Gr. CF8M (AISI 316)	very good chemical and corrosion resistance	5
chemical and nourishing products, sea water and demineralized water	stainless steel	A 351 Gr. CF3M (AISI 316 L)	high good chemical resistance and corrosion resistance	9
cold water /air	aluminum	EN-AC-44100	moderate corrosion resistance	2
sea water	bronze tin	bronze tin DIN 1705 Rg 10		4
sea water	bronze-aluminum	UNE EN 1982 CuAl 10 Fe5Ni5-C DN ≤ 350	good chemical and corrosion resistance	4
water and gas	cast steel	A 216 Gr. WCB	good mechanical resistance	6
hot water (max. 90°c) air and gas	nodular cast iron	EN GJS-400-15 (GGG 40) + Rislan	good mechanical strength similar to carbon steel	3
powdery products, pneumatic transport, sea water	nodular cast	EN GJS-400-15 (GGG 40) + Rislan	very good abrasion resistance	7
chemical products	duplex	A 351 Gr. CF3M	very good abrasion and corrosion resistance	8
sea water and corrosive atmospheres	super duplex	1.4469	very good chemical and corrosion resistance	10



FLOAT VALVES zFLO

figure 272



Float valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	A	25-200	10	В	-10+90

Ends Form Working positions

0

Application



FLOAT VALVES zFLO

figure 274



Float valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE	
grade	index	mm	bar	index	°C	
grey cast iron EN-GJL-250 5. 1301	А	25-200	10	В	-10+90	

Ends Form Working positions

0







AIR RELEASE VALVES ZAIR

figure 917



Air release valve

BODY MATERIAL		NOMINAL DIAMETER DN	TER PRESSURE		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	25	16	С	-10+100

Ends Form Working positions

→

Application



AIR RELEASE VALVES ZAIR

figure 918



Air release valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	25	16	С	-10+100

Ends Form Working positions





BOTTOM VALVES zBOT

figure 935



Bottom valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	℃
grey cast iron EN-GJL-250 5. 1301	А	40-300	10	В	-10+90

Ends Form Working positions

0

Application



RUBBER EXPANSION JOINTS

zJOI

figure 700



Rubber expansion joint

BODY MATERIAL			NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
EPDM	-	32-300	16	С	-10+100
EPDIVI	_	350-600	10	В	-10+100

Ends Working positions





















RUBBER EXPANSION JOINTS

figure 701



Rubber expansion joint

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
EPDM	L	20-80	16	C	-10+100

Ends Working positions





















GATE VALVES zGAT

figure 111



Gate valve EPDM/NBR sealed

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
nodular cast iron EN-GJS-500-7 5. 3200	D	40-600	16	С	-10+70

Ends Working positions Form Operation





















GATE VALVES zGAT

figure 112



Gate valve EPDM/NBR sealed

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
nodular cast iron EN-GJS-500-7 5. 3200	D	40-300	16	С	-10+40

Ends Form Working positions Operation











Application



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GATE VALVES zGAT

figure 120



Unidirectional wafer knife gate valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	℃
grey cast iron EN-GJL-250 5. 1301	A	50-1200	10	В	-10+90

Ends Form Working positions Operation























GATE VALVES zGAT

figure 121



Bidirectional wafer knife gate valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	A	50-600	10	В	-10+90

Ends **Working positions**

*







Application







GATEVALVES zGAT

figure 019



Flat wedge-ring gate valve

BODY MATERIAL			PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	A	400-1400	10	В	-10+120
nodular cast iron EN-GJS-400-15 5. 3106	В	400-600	10	В	-10+120

Ends Form Working positions Operation













Application









GATE VALVES ZGAT

figure 021



Flat wedge-ring gate valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	400-1400	10	В	-10+120
nodular cast iron EN-GJS-400-15 5. 3106	В	400-600	10	В	-10+120

Ends Form Working positions Operation

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(<u>©</u>)





Application



Not all of the applications are suitable for all of the executions.

SAFETY VALVES ZARMAK

figure 570



Full lift safety valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	А	20-150	16	C	-10+200
cast steel GP240GH 1.0619	F	20-150	40	E	-10+400
acid resistant steel GX5CrNi19-10 1.4308	R	20-100	40	E	-196+300

Ends Form Working positions

0





Application





ZARMAK SAFETY VALVES

figure 630



Full lift safety valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	MINAL SSURE PN	TEMPERATURE RANGE
grade	Index	mm	bar	Index	℃
grey cast iron EN-GJL-250 5.1301	A	20-150	16	С	-10+300
nodular cast iron EN-GJS-400-18-LT 5. 3103	С	20-100	40	E	-10+350
cast steel GP240GH 1.0619	F	20-150	40	E	-40+400
cast steel GP240GH 1.0619	F	20-400	63	F	-40+400
cast steel GP240GH 1.0619	F	25-100	100	G	-40+400
acid resistant steel GX5CrNi19-10 1.4308	R	20-150	40	E	-196+300

Ends Form Working positions

Application



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Not all of the applications are suitable for all of the executions.

SAFETY VALVES ZARMAK

figure **775**



Full lift safety valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
nodular cast iron EN-GJS-400-15 5. 3106	В	20-32	16	С	-10+200

Ends Form Working positions























SAFETY VALVES ZARMAK

figure **782**



Full lift safety valve

BODY MATERIAL		NOMINAL DIAMETER DN	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index	mm	bar	index	°C
brass CuZn40Pb2 CW617N	V	10-25	25	D	-10+120

Ends Form Working positions



Application



SAFETY VALVES ZARMAK

figure 240



Proportional safety valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	°C
grey cast iron EN-GJL-250 5. 1301	Α	15-200	16	С	-10+300
cast steel GP240GH 1.0619	F	20-200	40	E	-40+400
acid resistant steel GX5CrNi19-10 1.4308	R	20-100	40	E	-196+300

Form Working positions







Application





SAFETY VALVES ZARMAK

figure **781**



Proportional safety valve

BODY MATERIAL		NOMINAL DIAMETER DN	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index	mm	bar	index	℃
brass CuZn39Pb2 CW612N	Т	10-25	16	С	-10+200

Ends Form Working positions 1

Application

















LIQUID LEVEL GAUGES

zGAU

figure **706**



Liquid level gauge for welding

BODY MATERIAL		SIZE	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index		bar	index	°C
carbon steel S275JR 1.0044	0	I-V	25	D	0+250
acid resistant steel X6CrNiTi18-10 1.4541	М	I-V	25	D	0+250

Working positions



















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LIQUID LEVEL GAUGES

zGAU

figure 708



Liquid level gauge with glass pipe

BODY MATERIAL		SIZE	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index		bar	index	°C
carbon steel S235JRG2 1.0038	0	by needs	16	C	0+200
acid resistant steel X6CrNiTi18-10 1.4541	М	by needs	16	С	0+200

Ends Form Working positions







Application









LIQUID LEVEL GAUGES

zGAU

figure 713



Liquid level gauge with glass pipe

BODY MATERIAL		SIZE	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index		bar	index	°C
stainless steel X20Cr13 1.4021	Р	by needs	16	С	0+150
acid resistant steel X6CrNiTi18-10 1.4541	М	by needs	16	С	0+150

Ends

Working positions















LIQUID LEVEL GAUGES

figure 714



Liquid level gauge with glass pipe

BODY MATERIAL		SIZE	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index		bar	index	℃
carbon steel S235JRG2 1.0038	N	by needs	1	1	0+150
acid resistant steel X6CrNiTi18-10 1.4541	М	by needs	-	1	0+150

Ends Form Working positions





Application







LIQUID LEVEL GAUGES

zGAU

figure 715



Liquid level gauge with reflexive glass

BODY MATERIAL		SIZE	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index		bar	index	°C
carbon steel S235JRG2 1.0038	N	0-IV	40	E	0+150
acid resistant steel X6CrNiTi18-10 1.4541	М	0-IV	40	E	0+150

Ends Form Working positions





















figure 716



Liquid level gauge with reflexive glass

BODY MATERIAL		SIZE	PRES	IINAL SURE N	TEMPERATURE RANGE
grade	index		bar	index	°C
carbon steel S275JR	0	0-IV	25	D	0+150
1.0044	0	0-IV	40	Е	0+250
acid resistant steel X6CrNiTi18-10 1.4541	М	0-IV	40	E	0+250

Ends Form Working positions 0 Application

LIQUID LEVEL GAUGES

zGAU

figure **720**



Liquid level gauge with reflexive glass

BODY MATERIAL		SIZE	NOMINAL PRESSURE PN		TEMPERATURE RANGE
grade	index		bar	index	°C
carbon steel P355NH 1.0565	G	0-V	63	F	0+250
acid resistant steel X6CrNiTi18-10 1.4541	М	0-V	63	F	0+250

Ends Working positions 0











APPLICATION

Refrigeration and Air Conditioning Shipbuilding industy Power engineering Industrial water Compressed air Drinking water Diathermic oil Dry materials Neutral fluids Industry S Heating Sewage Steam I Glycol Gas (3) ****** Stop valves zGLO 201 • • • • 215 • • • • • • • • • • 216 • • • • • • • • • • 217 • • • • • • • **Bellow valves** 234 • • • • • • • • • • 235 • • • • • • • • . 237 • • • **Control valves** zCON 227 223 • • 224 • • • • • 236 • • • • • • • • • • **Check valves** zCHE 275 • 277 • • 287 • • • • • • • • 288 • . . • . • • • • 302 • • • 400 • • • • 401 • 402 • • • • 407 • • • • • • 408 821 823 • • **Bal valves** zBAL 565 • • • **Backflow preventers** zBAC 405 406 **Balancing valves** zSTA • 221 • • • 447 • • 494 • 495 • • • • • 496 • • 497 • • • • • • • 498 • • • • • • • • 499 •



APPLICATION

Refrigeration and Air Conditioning Petrochemical Industy Shipbuilding industy Power engineering Industrial water Compressed air Drinking water Diathermic oil Dry materials **Neutral fluids** Industry S Heating Sewage -- Glycol Steam Gas IA' U ****** Float valves zFLO 272 • • 274 • • Air release valves zAIR 917 918 **Bottom valves** zBOT 935 • • **Rubber expansion joints** zJOI 700 • • • • • • • • • 701 • • • **Gate valves** zGAT 111 112 • • • • 120 • • • • • 121 • • • • • 019 021 zARMAK **Safety valves** 570 • • 630 • • • • • • • • • • • • • 775 • • • • • • • • • • • 782 • • • 240 • • • 781 • • • • • • • • • • Liquid level gauges zGAU 706 • • • • 708 713 • • 714 • • • • • 715 • • • • • • • 716 • • • • • 720 • • • •



Certificates

- BVC certificate for the quality system according to ISO 9001:2008
- · Approval certificate for the quality system consistent with the directive 2014/68/UE
- ZETKAMA's approval pursuant to BV provisions No. 320 MODE II SCHEME
- · Loyd's Register Certificate for castings of grey cast iron and nodular cast iron (max product weight: 160 kg)
- · Det Norske Veritas Germanischer Lloyd approval certificate, within the scope of cast iron production
- TUV-NORD Certificate of conformity of the Quality Assurance System in accordance with AD 2000-Merkblatt W0
- TUV-NORD Certificate of conformity of the Quality Assurance System in accordance with AD 2000-Merkblatt W0
 on grey and nodular cast iron castings
- TUV-NORD Certificate of conformity of the Quality Assurance System in accordance with Directive 97/23/EC on safety valves modul D
- TUV-NORD Certificate of conformity of the Quality Assurance System in accordance with Directive 97/23/EC on safety valves modul B
- · Marketing authorization for the Ukrainian market
- · Marketing authorization for the Belarussian market
- Certificate Russian River Register
- Certificate of state registration of the Customs Union (fig. 111, 112, 115, 116, 003, 019, 021, 497, 498, 499, 565)
- Certificate of conformity 1c with technical regulations Customs Union TP TC 010/2011 "Safety of Machines and Equipment"
- Certificate of conformity 1c with technical regulations Customs Union TP TC 032/2013 "Safety of Devices Working under Pressure"
- Declaration of conformity with the technical regulations of the Customs Union TP TC 032/2013 "Safety of Devices Working under Pressure"
- · Certificate UDT Modul B
- · Certificate UDT Modul D









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