



Catalogue of valves



WORLD MANUFACTURER OF INDUSTRIAL VALVES



The long proven and strong position in the world market, experienced personnel, up-to-date technology and capability of producing valves up to the biggest size as well as up to the biggest working pressure make MSA, a.s. the company that could be considered as one of the world leaders in valve manufacturing.

CONTENT

BALL VALVES

K83TW	fully welded body ball valves	11
K83TB	bolted body ball valves	11
K 90	double block and bleed valve	12
K 89	metal seated ball valves	12
K 88	cryogenic ball valves	13
K 73	top-entry soft seated ball valve	14
K 79	top-entry metal seated ball valve	14
K 78	top-entry cryogenic ball valve	15
K 84	ball valves with floating ball	15

VALVES ACCORDING TO API, ANSI, ASME, ASTM STANDARDS

C 09.2	gate valves	17
C 09.2	cryogenic gate valves	17
C 09.1	globe valves	18
C 09.1	cryogenic globe valves	18
C 09	swing check valves	19
C 09.4	swing check valves according to API 6D	19
A 14	nozzle check valves	20
C 65.8	dual plate check valves	20
L 32	butterfly valves	21
K 40	plug valves	21

VALVES ACCORDING TO EN STANDARDS

A 46	check valves	23
S 38	gate valves	23
S 38.4	gate valves with non-rising stem	24
S 42	high-pressure gate valves with pressure-seal bonnet	25
L 10 127	swing check valves	25
M 14	expansion joints (one-sided)	26
M 17	expansion joints (two-sided)	26
C 26	centric orifice	27
T 10	hot tapping flange	27

THROUGH CONDUIT TYPE

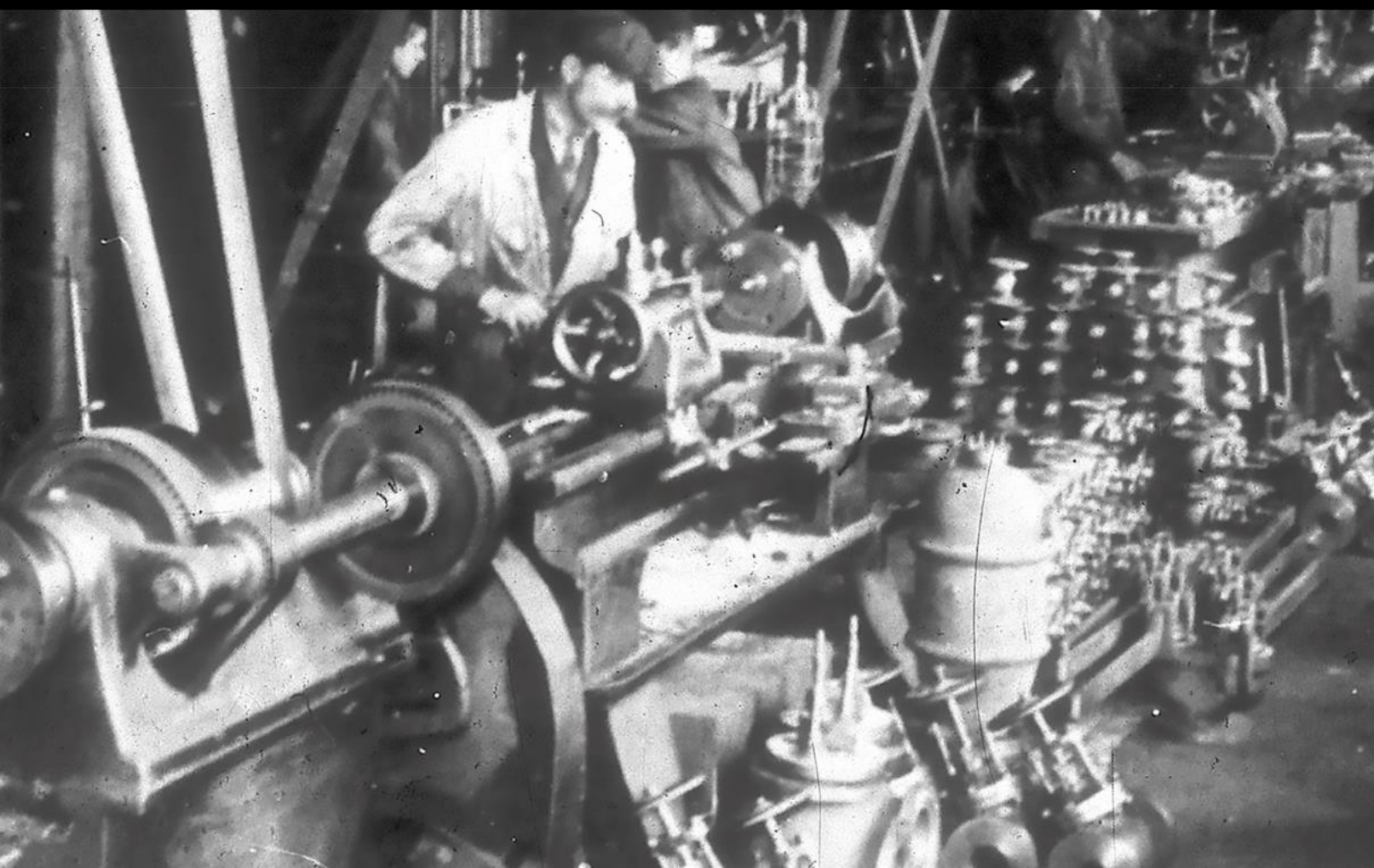
S 85.1	cast body slab gate valves	29
S 85.2	welded body slab gate valves	29

VALVES FOR NUCLEAR POWER PLANTS

A 00	gate valves	31
A 09	regulating gate valves	31
A 01	quick-acting gate valves with electrical actuator	32
A 01	quick-acting gate valves with pneumatic actuator	32
A 10	shut-off bellows-type globe valves	33
A 11	regulating bellows-type globe valves	33
A 14	nozzle check valves	34
A 31	stop check valves	34
L 32	butterfly valves	35
A 49	regulating butterfly valves	35
A 41	non-slam swing check valves	36
A 42	swing check valves with remote indication of stop device position	37
C 23	swing check valves	37
A 44	swing check valves with pressure seal bonnet	38
A 46	check valves	38
K 83	ball valves	39

6 “My grandfather and my dad both worked in this company
and I wish, my son will work here one day, too.”

Industrial valves since 1886



MORE THAN 130-YEAR-LONG HISTORY OF INDUSTRIAL VALVE PRODUCTION

- 1886** The company DANGO-DIENETHAL focused on industrial valves production was registered at Ostrava County Court
- 1890** Local entrepreneur Jan Holuscha established a small cabinetmaker shop
- 1947** The Jan Holuscha Company renamed to MSA, a.s.
- 1948** The DANGO-DIENETHAL company became a part of MSA, a.s.
- 1953** Boom of industrial valves manufacturing
- 1975** Valves for nuclear power plant launch
- 1992** MSA, a.s. Dolni Benešov joint-stock company established
- 2006** MSA, a.s. became a member of Chelpipe Group
- 2013** Major restructuring and reconstruction of the company started
- 2015** Finish of the first stage of large reconstruction of manufacturing plant and opening “New manufacturing hall”
- 2019** EHP 003 District Heating certificate received (valves per EN 488)
- 2021** MSA, a.s. became a member of TMK Group

MSA, a.s. COMPANY PROFILE



MSA, a.s. is a member of TMK Group, one of the world's Top Five steel pipe manufacturers based on the production volume. TMK Group offers its customers a wide range of tubular products and related goods – connecting parts for pipelines as well as artificial lift and oil and gas production equipment.

MSA, a.s. is a company with a long tradition of industrial valves manufacturing. Design and development capacities, strong technological and production background of the company enables to fulfill demanding requirements of our customers and thus ranks MSA, a.s. among the top world manufacturers of industrial valves.

MSA, a.s. manufactures a wide assortment of ball valves, gate valves, globe valves, swing check valves and other valve types, including cryogenic valves and valves for nuclear power plants.

Valves manufactured by MSA, a.s. are used in the following industrial fields:



CRUDE OIL TRANSPORT, STORAGE AND PROCESSING



NATURAL GAS TRANSPORT, STORAGE, DISTRIBUTION AND PROCESSING



NUCLEAR AND CONVENTIONAL POWER GENERATION



HEAT GENERATION AND DISTRIBUTION SYSTEMS



WATER SUPPLY SYSTEMS



METALLURGY



LNG



PETROCHEMISTRY AND REFINERIES

The products of MSA, a.s. meet the strictest requirements of consumers; they are applied for various climatic conditions and pipeline system parameters, including maximum working pressure values, transportation of aggressive media and connecting to large-diameter mains.

Each product developed by MSA, a.s. possesses the following functional properties:

- Increased operating reliability under hydraulic and aerodynamic pressure;
- Application of high-strength materials;
- Assurance of the necessary structural rigidity;
- High technical standard, low maintenance cost.

MSA, a.s. has a special pressure testing room as well as test facilities for different kinds of non-destructive tests: 3D measuring, dye-penetrant inspection, ultrasonic and X-ray tests, magnetic particle test, acoustic

emission diagnostics, vacuum tightness tests, acceptance tests are held in the presence of Customer's representatives, cryogenic tests by Helium at temp. -196°C. Quality of the manufactured valves is based on quality system certification of products, employees and selected procedures.

Company certifications are based on requirements of the customers; besides quality system certifications (EN ISO 9001:2015, EN ISO 14001:2015, API Spec Q1, PED 2014/68/EU) MSA, a.s. holds many different production certificates and type certificates (API 6D, AD 2000, EN 488, EN 14141, SIL 2, SIL 3, OIT, Firesafe atd).

Health, safety, security, and protection of the environment (HSSE) are core values that constitute the integral part of our commitment to conducting our business in a responsible way (EMS, ISO 45001 (OHSAS)).

BALL VALVES

AMBIENT TEMPERATURE from -60 °C to +60 °C



**DELIVERING
TO MORE THAN
75 COUNTRIES
WORLDWIDE WHERE
OUR VALVES HAVE
PROVEN THEMSELVES**

K83 TW fully welded body ball valves

BASIC TECHNICAL DATA

- water, gas, oil, acid working medium
- primary metal secondary soft or primary soft secondary metal seats
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



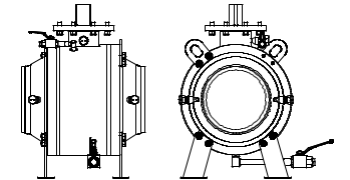
from -50 up to +200



CLASS 150 - 2500



NPS 1/2" - 56"



K83 TB bolted body ball valves

BASIC TECHNICAL DATA

- water, gas, oil, acid working medium
- primary metal secondary soft or primary soft secondary metal seats
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



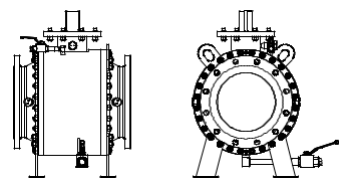
from -50 up to +200



CLASS 150 - 2500



NPS 1/2" - 56"



K 90 double block and bleed valve

BASIC TECHNICAL DATA

- water, gas, oil, acid working medium
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



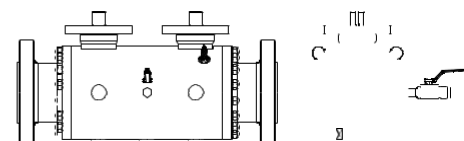
from -50 up to +200



CLASS 150 - 2500



NPS 1/2" - 56"



K 89 metal seated ball valves

BASIC TECHNICAL DATA

- media with high temperatures and abrasive media
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



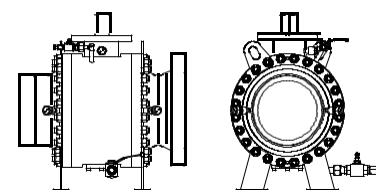
from -50 up to +550



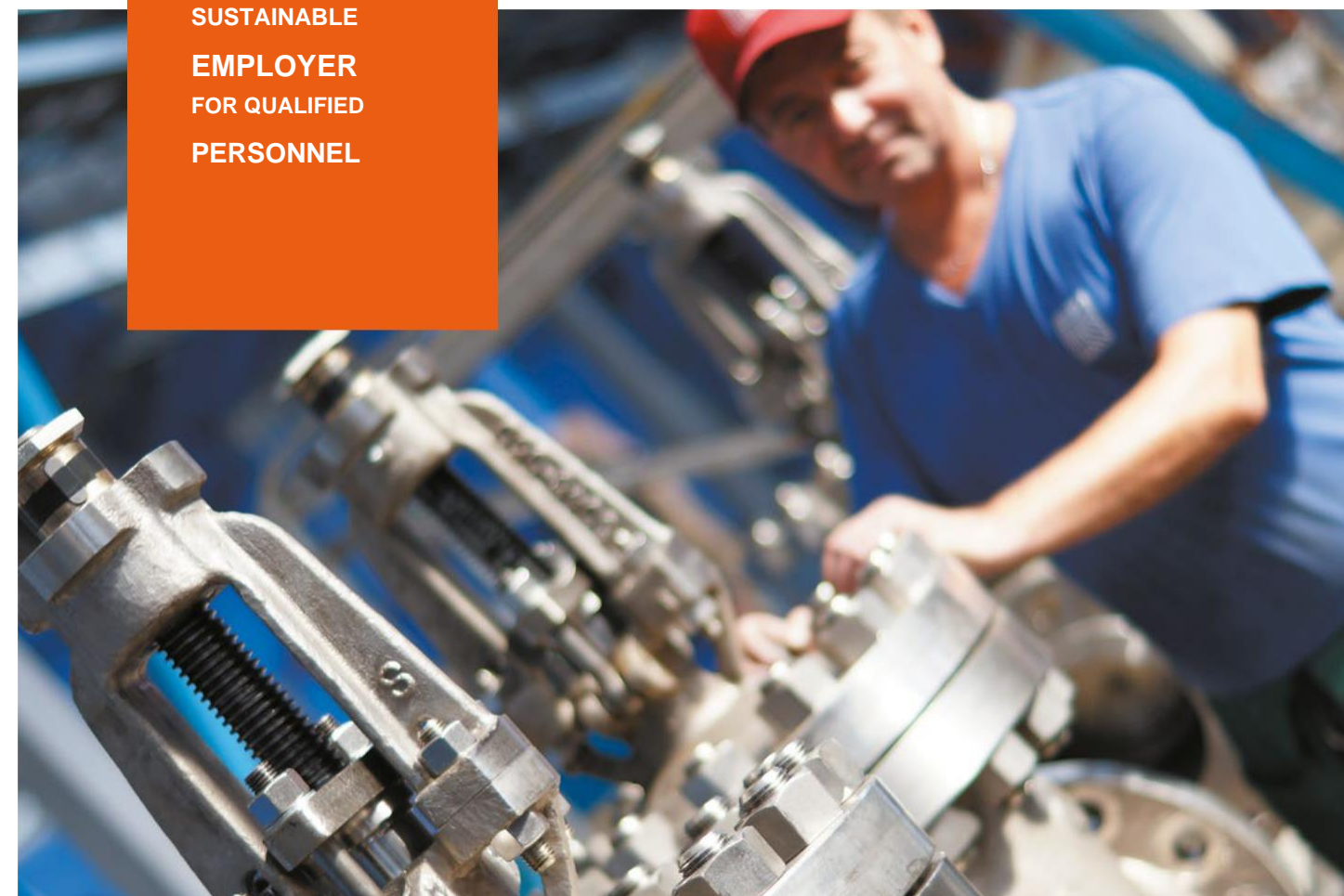
CLASS 150 - 2500



NPS 1/2" - 56"



SUSTAINABLE
EMPLOYER
FOR QUALIFIED
PERSONNEL



K 88 cryogenic ball valves

BASIC TECHNICAL DATA

- LNG
- flanged or welded connection
- material stainless steel



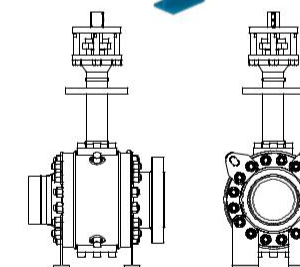
from -196 up to -50



CLASS 150 - 2500



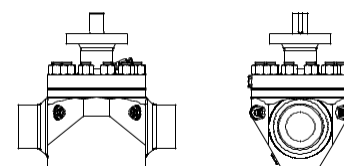
NPS 1/2" - 36"




K73 top-entry soft seated ball valve

BASIC TECHNICAL DATA

- water, gas, oil, acid working medium
- primary metal secondary soft or primary soft secondary metal seats
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



 °C
from -50 up to +200

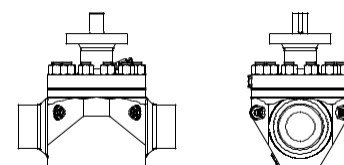
 CLASS 150 – 2500


 NPS 1/2" - 56"


K79 top-entry metal seated ball valve

BASIC TECHNICAL DATA

- media with high temperatures and abrasive media
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



 °C
from -50 up to +550


 CLASS 150 – 2500


 NPS 1/2" - 56"

K78 top-entry cryogenic ball valve

BASIC TECHNICAL DATA

- material stainless steel
- flanged or welded connection
- material carbon steel
- alloy steel, duplex steel
- media with high temperatures and abrasive media

 °C
from - 50 up to +550

 CLASS 150 - 2500

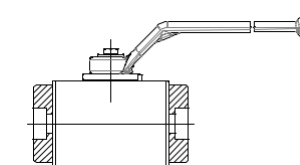
 NPS 1/2" - 20"





K84 ball valves with floating ball

BASIC TECHNICAL DATA

- water, gas, oil, oil products, LNG
- manual control (lever)



 °C
from - 50 up to +200

 CLASS 150 - 2500

 NPS 1/2"-6"

VALVES ACCORDING TO API, ANSI, ASME, ASTM STANDARDS

AMBIENT TEMPERATURE from -60 °C to +60 °C



EXPERIENCED
SUPPLIER
FOR CRYOGENIC
VALVES
SIZE 1/2"-56"
CLASS 150-2500

C09.2 gate valves

BASIC TECHNICAL DATA

- water, saturated steam, air, oil and gas products, nonaggressive fluids
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



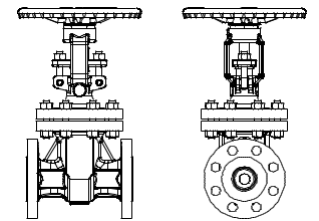
from -50 up to +538



CLASS 150 - 1500



NPS 1/2" - 56"



C09.2 cryogenic gate valves

BASIC TECHNICAL DATA

- LNG
- flanged or welded connection
- material stainless steel



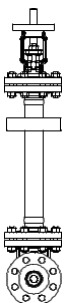
from -196 up to -50



CLASS 150 - 1500



NPS 1/2" - 36"



C09.1 globe valves

BASIC TECHNICAL DATA

- water, saturated steam, oil and gas products, nonaggressive fluids
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



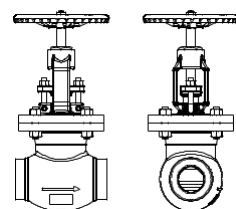
from -50 up to +538



CLASS 150 - 1500



NPS 1/2" - 24"



C09 swing check valves

BASIC TECHNICAL DATA

- water, steam, oil and gas products, nonaggressive fluids
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



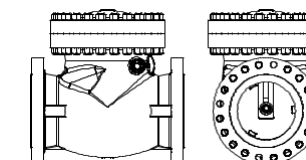
from -50 up to +538



CLASS 150 - 600



NPS 1/2" - 42"



C09.1 cryogenic globe valves

BASIC TECHNICAL DATA

- LNG
- flanged or welded connection
- material stainless steel



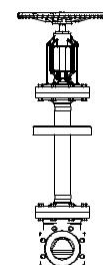
from -196 up to -50



CLASS 150 - 1500



NPS 1/2" - 14"



C09.4 swing check valves according to API 6D

BASIC TECHNICAL DATA

- water, steam, oil and gas products, nonaggressive fluids
- flanged connection
- material carbon steel, alloy steel, stainless steel, duplex steel



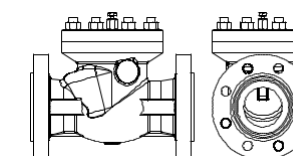
from -50 up to +538



CLASS 150 - 1500



NPS 1/2" - 30"



A14 nozzle check valves

BASIC TECHNICAL DATA

- water, steam, gas, oil, nonaggressive fluids
- flanged and welded connection
- material carbon steel, austenitic steel



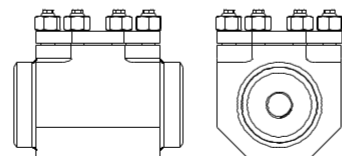
from -50 up to +538



CLASS 150 - 1500



NPS 2" - 24"



C65.8 dual plate check valves

BASIC TECHNICAL DATA

- oil, gas
- flanged or welded connection
- LNG
- material stainless steel



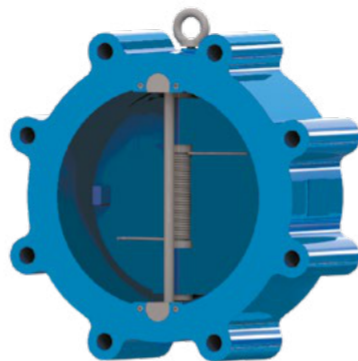
from -50 up to +500



CLASS 150-1500



NPS 1/2"-56"



L32 butterfly valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- flanged or welded connection
- material carbon steel, austenitic steel, duplex steel
- saturated steam



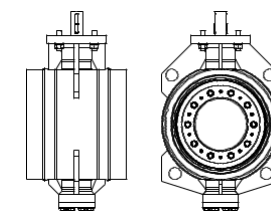
from -50 up to +200



CLASS 150 - 2500



NPS 2" - 56"



K40 plug valves

BASIC TECHNICAL DATA

- oil, gas
- flanged or welded connection
- material carbon steel, austenitic steel
- LNG



from -50 up to +538



CLASS 150-600



NPS 2" - 56"



VALVES ACCORDING TO EN STANDARDS

AMBIENT TEMPERATURE from -60 °C to +60 °C



ONGOING
INNOVATION
AND MODERNIZATION
OF OUR
PRODUCTION

A46 check valves

BASIC TECHNICAL DATA

- water, sea water, air, steam, gas, oil, nonaggressive fluids, acid working medium
- welded connection
- material carbon steel, austenitic steel, duplex
- triple offset design ensures friction free stroking at the final point of closure



from -50 up to +350



PN 16 - 160



DN 200 - 600



S38 gate valves

BASIC TECHNICAL DATA

- water, steam, oil and gas products, nonaggressive fluids
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



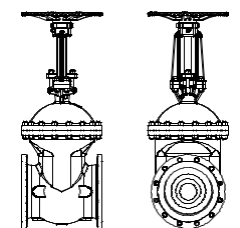
from -50 up to +538



PN 16 - 100



DN 50 - 1200



S38.4 gate valves with non-rising stem

BASIC TECHNICAL DATA

- gas, water, oil, acid working medium
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel
- primary metal secondary soft of primary soft secondary metal seats



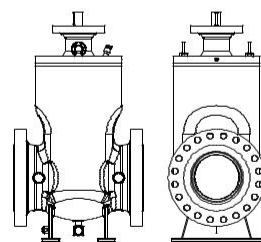
from -50 up to +538



PN 16 - 100



DN 50 - 500



**SUCCESSFUL
REFERENCES
FROM THE
BIGGEST
PROJECTS
OF THE WORLD**

S 42 high-pressure gate valves with pressure-seal bonnet

BASIC TECHNICAL DATA

- water, steam, air, nonaggressive fluids
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



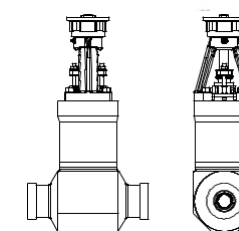
from -20 up to +575



PN 160 - 400



DN 50 - 400



L10 127 swing check valves

BASIC TECHNICAL DATA

- water, steam, air, nonaggressive fluids
- welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



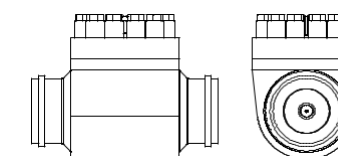
from -20 up to +575



PN 160 - 400



DN 30 - 300



M 14 expansion joints (one-sided)

BASIC TECHNICAL DATA

- water, steam, nonaggressive fluids
- welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



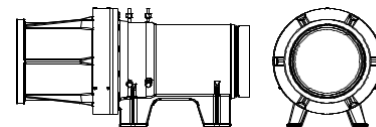
up to +200



PN 25



DN 200 - 1200



M 17 expansion joints (two-sided)

BASIC TECHNICAL DATA

- water, steam, nonaggressive fluids
- welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



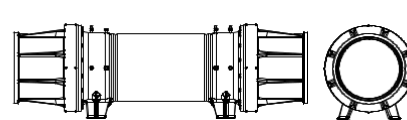
up to +160



PN 25



DN 200 - 1200



C26 centric orifice

BASIC TECHNICAL DATA

- the centric orifice is designed for a wide range of applications in areas of steam, liquid and gas flow measurement in pipelines. Flange, welded or wafer type



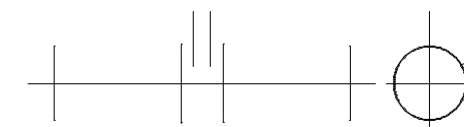
from -50 up to +600



PN up to 400



DN 15 - 1000



T10 hot tapping flange

BASIC TECHNICAL DATA

- hot tapping flange is designed for pipe repairs without the need for shutting down the piping system



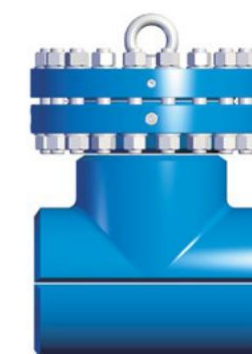
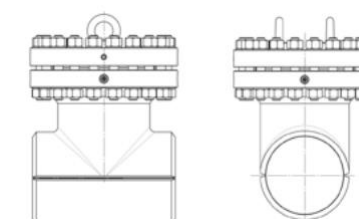
from -50 up to +120



CLASS up to 600



DN 50 - 1400



THROUGH CONDUIT TYPE

AMBIENT TEMPERATURE from -60 °C to +60 °C



RESEARCH &
DEVELOPMENT
ALL THE KEY
PROCESSES
AND TECHNOLOGIES
ARE IN-HOUSE

S85.1 cast body slab gate valves

BASIC TECHNICAL DATA

- oil and oil products
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



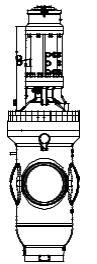
from -50 up to +538



CLASS 150 - 1500



NPS 2" - 56"



S85.2 welded body slab gate valves

BASIC TECHNICAL DATA

- oil and gas products
- flanged or welded connection
- material carbon steel, alloy steel, stainless steel, duplex steel



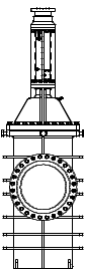
from -50 up to +538



CLASS 150 - 600



NPS 2" - 56"



VALVES FOR NUCLEAR POWER PLANTS

AMBIENT TEMPERATURE from -60 °C to +60 °C



VALVES
FOR NUCLEAR
POWER PLANTS
SINCE 1975

A00 gate valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel
- operation hand wheel, electrical actuator, remote control



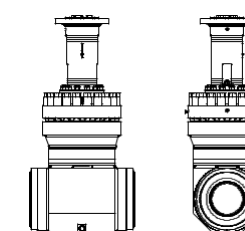
up to +350



Pmax 20,0 MPa



DN 50 - 800



A09 regulating gate valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel
- operation hand wheel, electrical actuator



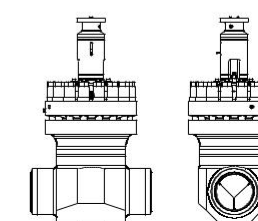
up to +350



Pmax 20,0 MPa



DN 65 - 800



A 01 quick-acting gate valves with electrical actuator

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- actuating time ≤ 10 s
- material carbon steel, austenitic steel



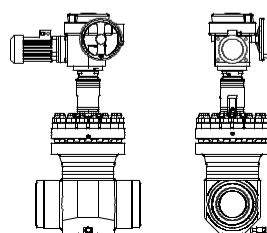
up to +350



Pmax 20,0 MPa



DN 50 - 300



A 01 quick-acting gate valves with pneumatic actuator

BASIC TECHNICAL DATA

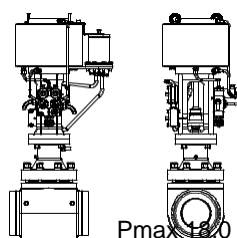
- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- actuating time ≤ 10 s
- operating pressure of air 4,5 MPa \pm 0,5 MPa
- material carbon steel, austenitic steel



up to +350



Pmax 20,0 MPa DN 100 - 600



A10 shut-off bellows-type globe valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel
- operation hand wheel, electrical actuator, remote control



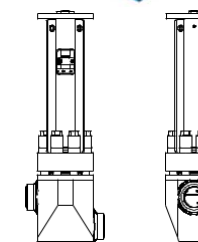
up to +350



Pmax 20,0 MPa



DN 50 - 150



A11 regulating bellows-type globe valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel
- operation hand wheel, electrical actuator, remote control



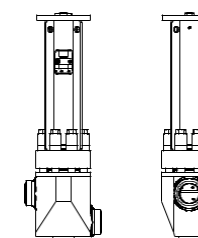
up to +350



Pmax 20,0 MPa



DN 50 - 150



A14 nozzle check valves

BASIC TECHNICAL DATA

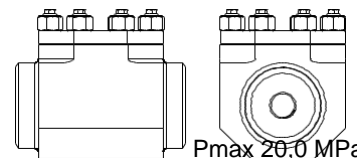
- water, steam, gas, oil, nonaggressive fluids
- flanged and welded connection
- material carbon steel, austenitic steel
- minimum pressure loss utilizing Venturi effect
- excellent static and dynamic characteristic



up to +350



Pmax 20,0 MPa



DN 65 - 300

A31 stop check valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel, SAF 2507
- design with remote signaling or without remote signaling
- self-acting by service fluid



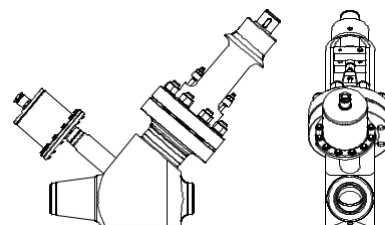
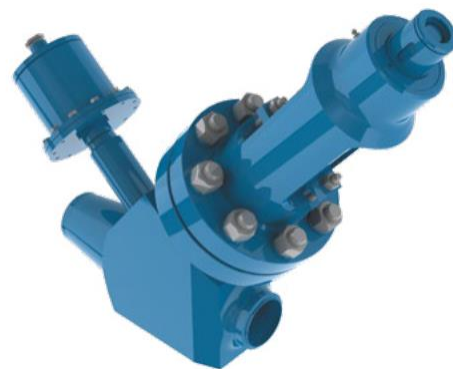
up to +350



Pmax 20,0 MPa



DN 80 - 150



L32 butterfly valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- flanged or welded connection
- material carbon steel, austenitic steel, duplex steel



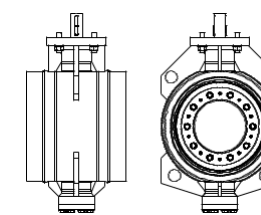
up to +250



Pmax 1,0 MPa



DN 150 - 1200



A49 regulating butterfly valves

BASIC TECHNICAL DATA

- water, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel



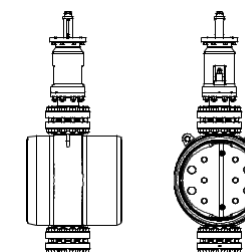
up to +350



Pmax 11,0 MPa



Dmax 800



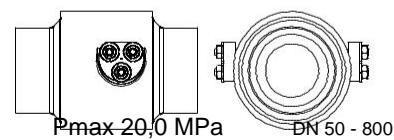
A41 non-slam swing check valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- flanged or welded connection or wafer type
- material carbon steel, austenitic steel



up to +350



A42 swing check valves with remote indication of stop device position

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel



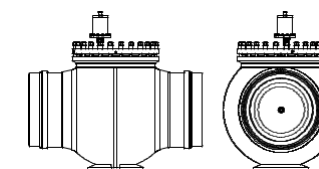
up to +350



Pmax 20,0 MPa



DN 80 - 600



C23 swing check valves

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel



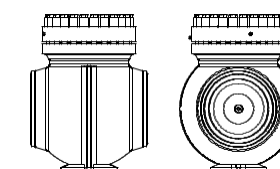
up to +350



Pmax 20,0 MPa



DN 50 - 600



MORE THAN
100 DESTINATION



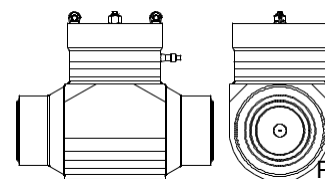
A 44 swing check valves with pressure seal bonnet

BASIC TECHNICAL DATA

- water, steam, air, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel



up to +350



Pmax 20,0 MPa DN 100 - 300

A 46 check valves

BASIC TECHNICAL DATA

- water, sea water, air, steam, gas, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel, SAF 2507
- triple offset design ensures friction free stroking at the final point
- of closure



up to +350



Pmax 20,0 MPa



DN 200 - 600



UP TO
10 000 PIECES
OF QUALITY
VALVES EVERY
YEAR

K 83 ball valves

BASIC TECHNICAL DATA

- water (sea water), air, oil, nonaggressive fluids
- welded connection
- material carbon steel, austenitic steel, SAF 2507



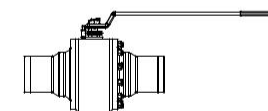
up to +200



Pmax 20,0 MPa



DN 50 - 100



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

CONTACTS

HEADQUARTERS

TMK

40, bld. 2a, Pokrovka Street
101000, Moscow, Russia
Tel.: +7 (495) 775-76-00
Fax: +7 (495) 775-76-01
tmk@tmk-group.com

SALES OFFICE

MSA, a.s.

Hlučinská 641
747 22 Dolní Benesov
Czech Republic
Tel: +420 553 881
111_sales@msa.cz

