



GENERAL FEATURES

eko2200 PN 16 CI Gate Valve	eko2300 BS 5150 - PN 16 NRS Gate Valve	eko2300 BS 5150 - PN 16 OS&Y Gate Valve
Body: EN JL 1040 Heavy Duty Cast Iron	Body: EN JS 1050 Ductile Iron, EN JL 1040 Cast Iron	Body: EN JS 1050 Ductile Iron, EN JL 1040 Cast Iron
Wedge: EN JL 1040	Wedge: EN JS 1050 Ductile Iron	Wedge: EN JS 1050 Ductile Iron
Stem: Stainless Steel 420, Stainless Steel 316	Stem: Stainless Steel 420, Stainless Steel 316, Brass	Stem: Stainless Steel 420, Stainless Steel 316, Brass
Epoxy painting in blue	Epoxy painting in blue	Epoxy painting in blue
Seat: Brass, Stainless Steel	Seat: Stainless Steel, Brass	Seat: Stainless Steel, Brass
Non rising stem	Non rising stem	Rising Stem
From DN 50 to DN 300	From DN 50 to DN 600	From DN 500 to DN 600

DESIGN STANDARDS

Valve Design	BS EN 1171, BS 5150
Connection	Flanged, acc to EN 1092-2
Face to Face Dimensions	EN 558-1 Basic Series 14 (F4)
Valve Test	EN 12266-1
Marking	EN 19

TECHNICAL ADVANTAGES

Excellent choice for HVAC applications.

- Can be supplied with multi-turn electrical actuators

REMARKS

eko2000 Series metal seated gate valves can be used as ISOLATION VALVES.

- Electrical actuator connection is succeeded with an intermediary top flange

APPLICATIONS

Application fields and temperatures of eko2000 Series valves vary according to the selection of the seat.

Please choose and order the seat material considering the requirements of application.

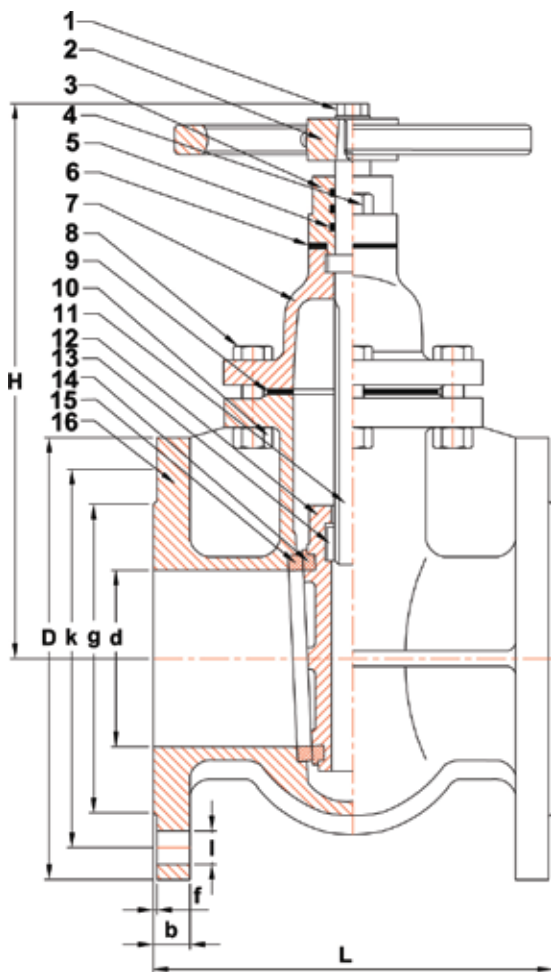


eko2300
OS&Y

eko2300
NRS

PLEASE NOTE: Items written in grey are optional and can be supplied upon request.

TECHNICAL DRAWING AND DIMENSIONS (eko2200)



PARTS AND MATERIALS

No	Part Name	Material
1	Bolt	DIN 933
2	Hand Wheel	Cast Iron (EN-JL-1040)
3	Bushing	Cast Iron (EN-JL-1040)
4	Bolt	DIN 933
5	O-Ring	EPDM
6	Gasket	Graphite
7	Bonnet	Cast Iron (EN-JL-1040)
8	Bolt	DIN 933
9	Gasket	Graphite
10	Nut	DIN 934
11	Stem	Stainless Steel (17440X20Cr13)
12	Wedge	Cast Iron (EN-JL-1040)
13	Wedge Nut	Brass (MS58)
14	Wedge Gasket	Brass (MS58)
15	Seat	Brass (MS58)
16	Body	Cast Iron (EN-JL-1040)

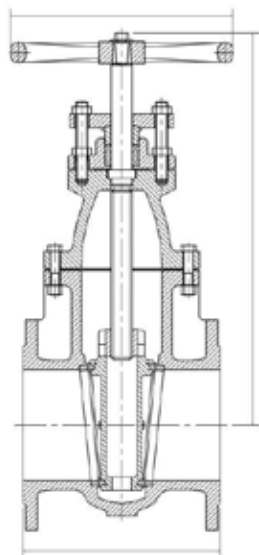
DIMENSION TABLE (eko2200)

DIMENSIONS			FLANGE ACC TO ISO 7005 - 2 / EN 1092-2								
DN	H	H	d	g	k	D	l	b	f	Number of Holes	Weight (kg)
40	200	140	40	84	110	160	19	18	3	4	11
50	202	150	50	99	125	165	19	20	3	4	11,8
65	222	170	65	118	145	185	19	20	3	4	15
80	250	180	80	132	160	200	19	22	3	8	19,2
100	303	190	100	156	180	220	19	24	3	8	26,4
125	351	200	125	184	210	250	19	26	3	8	40
150	411	210	150	211	240	285	23	26	3	8	50
200	498	230	200	266	295	340	23	30	3	12	78
250	579	250	250	319	355	405	28	32	3	12	142
300	679	270	300	370	410	460	28	32	4	12	179
350	870	290	350	429	470	520	28	36	4	16	285
400	941	310	400	480	525	580	51	38	4	16	325

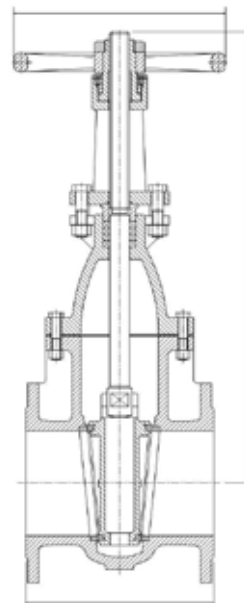


TECHNICAL DRAWING AND DIMENSIONS (eko2300)

NRS TYPE



OS&Y TYPE



DIMENSION TABLE (eko2300)

Size	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	178	191	203	229	254	267	292	330	356	381	406	432	457	508
H-OS&Y (Open)	405	415	486	632	710	842	1100	1228	1373	1595	1900	2210	2600	3040
H-NRS	327	322	340	420	477	542	668	750	835	1015	1120	1210	1250	1390
D	178	178	190	250	300	300	356	400	457	508	558	610	610	762

PARTS AND MATERIALS

No	Part Name		Material	EN Spec.	ASTM Spec.
1	Body	PN16/Class125	Cast Iron	EN-JL-1040	A126 Class B
2		PN25/Class250	Ductile Iron	EN-JS-1050	A536 65-45-12
3	Body Trim		Bronze	EN 1982 CC491K	B62 C83600
4	Wedge Trim		Bronze	EN 1982 CC491K	B62 C83600
5	Wedge	PN16/Class125	Cast Iron	EN-JL-1040	A126 Class B
6		PN25/Class250	Ductile Iron	EN-JS-1050	A536 66-45-12
7	Stem Nut		Bronze	EN 1982 CC491K	B62 C83600
8	Stem		Brass	CuZn39Pb3	B16 C83600
9			Stainless Steel	BS970 420837	AISI 420
10	Bonnet	PN16/Class125	Cast Iron	EN-JL-1040	A126 Class B
11		PN25/Class250	Ductile Iron	EN-JS-1050	A536 66-45-12
12	Gasket		Graphite	Non-Asbestos	Non-Asbestos
13	Yoke	PN16/Class125	Cast Iron	EN-JL-1040	A126 Class B
14		PN25/Class250	Ductile Iron	EN-JS-1050	A536 66-45-12
15	Packing		Graphite	Non-Asbestos	Non-Asbestos
16	Handwheel	PN16/Class125	Cast Iron	EN-JL-1040	A126 Class B
17		PN25/Class250	Ductile Iron	EN-JS-1050	A536 65-45-12

eko2200 & eko2300 PN16 METAL SEAT & BS5150 GATE VALVES



GENERAL INSTRUCTIONS AND INSTALLATION



Handle valve with precaution

Take care of the coatings and protections. Do not drag the valves, avoid shocks and frictions which may cause starters of corrosion.



Store the equipment under good conditions

The valves must be protected from;
Humidity and rain to avoid corrosion;

Wind, sand; to avoid the penetration of solid particles whose presence is catastrophic for the tightness;
Sunshine and heat; they damage the coatings, particularly harmful for plastic valves and fittings very sensitive to the ultraviolet.

Valves with rubber seat must always be stored half-opened.

The apparatuses with metal seat must be stored closed (except particular specifications) to avoid the penetration of the particles in internal volumes.

Ball valves must be stored in open position.

Preserve the apparatuses with their plastic caps which should be taken away when mounting the valves.

Clean the pipes

Rinsing the pipes is essential (water, air, steam if compatible) before testing and starting of the installations. It is critical to eliminate all the particles and several objects which could remain in the pipes and especially welding residues which could definitively damage the valve seat.

Clean the gasket seat

Be sure that the gasket seats are perfectly clean and free from stripes.



Align pipings

Control piping alignment. For correcting bad alignments do not rely on the valves: this may cause leakage and operating defect or even of breaking.

Avoid Water Hammers

A rise in pressure of extreme brutality can be generated by a water hammer. A water hammer can cause the damage: butterfly valve disc splits, destroyed various apparatus, axes deformed. There are very varied causes of the water hammers but generally: the starting of pump and the sudden closing of valve.



Respect assembly direction

Certain valves are one-way (non-return valve, knife gate valves, etc.)

Take care of an assembly in conformity with the arrow direction or of the instructions of assembly.

Use support for heavy valves

In certain cases, valves of large length, heavy servo-motor, it can be essential to provide for supports which will avoid tensions prejudicial with the operating risking the fast deterioration of the stem and of the tightness.



Maintenance and control

- Control the valves yearly.
- Change the gaskets after each disassembling.
- Any maintenance action must be carried out when the installation is in the atmospheric pressure.
- Cut energy supply of the actuators.
- Respect the recommended positions of assembly.
- Respect the disassembling direction.
- In the event of prolonged storage or of weak frequency of operation, lubricate the valve stem regularly.
- When assembling of an electric motor on the valve, take care to lubricate the nut of the motor and the stem of the valve.