



GATE VALVES

General Information

A gate is essentially a simple interception valve, and can be either fully closed or fully open. When fully open, the passage cross section is equal to the outlets, with negligible pressure drops.

When they are employed as modulating valves, gates may cause high turbulent flow and, consequently, quick seats erosion, in addition to noisy and unpleasant vibrations of the closing wedge.

Because of its shape, the wedge adheres to the seats only at complete closure, thus avoiding any friction which may damage the seats. In the most usual versions, the wedge can be massive or flexible. In the flexible version the wedge consists of two discs connected in their central parts only, and thus having a good peripheral flexibility which allows a perfect matching to the seats. The seal rings are usually obtained in the body, and are supplied in the material most suitable for their use. The particular shape of the body bottom can receive any solid particle that the fluid may drag on the pipes bottom, so that these particles cannot scratch the seat during the closing phase, even if the lower part of the seat goes beyond the inlet and outlet flanges.

During the opening phase, and because of the pressure acting on the large surface wedge, the friction between wedge and seats can be higher enough to hinder or hamper the operation: in this case, and especially in case of big sizes or high pressures, a by-pass balancing the pressures acting on the two faces of the wedge can

be installed.

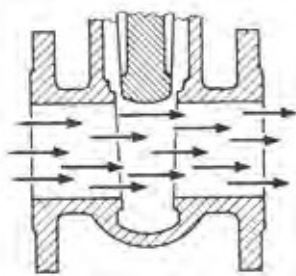
Except for few rapid-operation special types, the wedge is usually driven by a thread stem. The stem can be "non rising/inside screw" type, when the yoke nut is held by the wedge, or "rising/outside screw" type.

In the "inside screw" type, the thread side of the stem is in contact with the fluid, that cannot consequently be corrosive, not to endanger the gate functioning. In this case the gate dimension is constant.

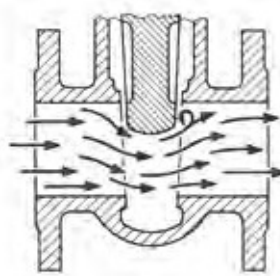
In the "outer screw" type the stem is linked to the wedge by means of a pin joint and the screw is not in contact with the fluid. The gate dimension is slightly larger than the outlet bore, and can visually indicate the valve opening degree. The yoke nut is held by a yoke with particularly elastic arms, so that the gate cannot be blocked in the close position by thermal expansion. Sometimes, when the wedge is completely raised, it works as a back-locker on the inside part of the bonnet, thus allowing the gland gaskets replacement with fully open gate.

In the "parallel seats" gates, the wedge is substituted by two parallel discs, slipping with no friction between the seal rings. The fluid pressure, or a proper device, will push the discs against the rings only when the gate is in its close position.

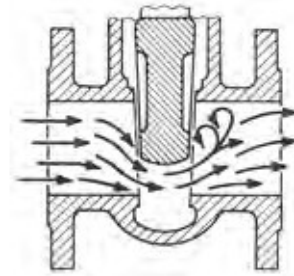
Types of flow inside a Gate



Full Bore

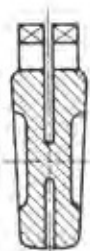


Bore 2/3



Bore 1/3

Cunei



Flexible



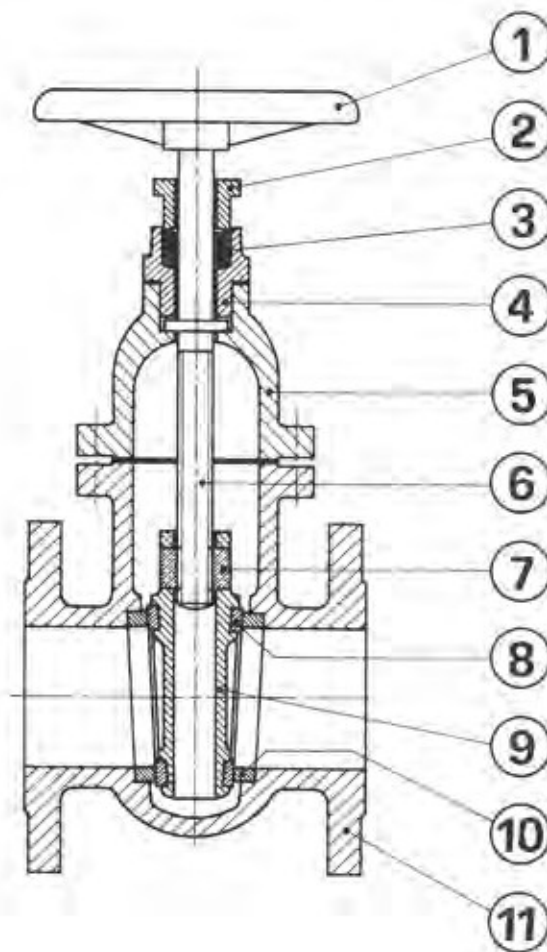
Massive



Parallel seats



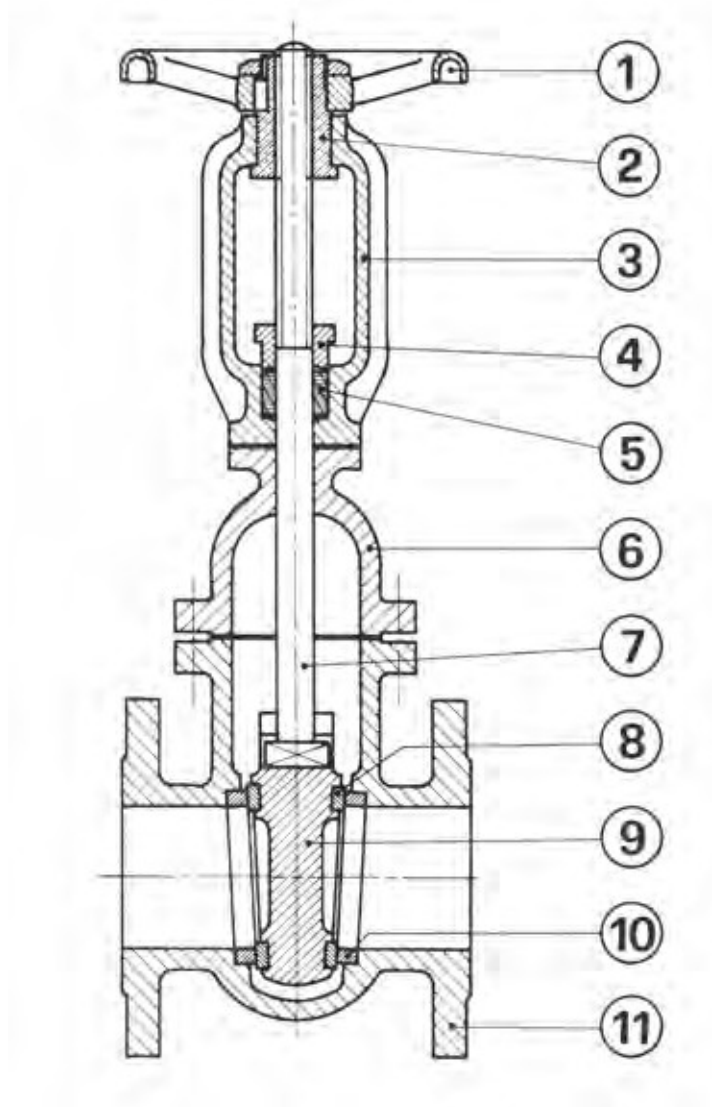
Jointed



Non Rising Stem Gate Valve

1	Volantino
	Handwheel
2	Premistoppa
	Gland
3	Stoppa
	Stem Packing
4	Camera stoppa
	Stuffing Box
5	Coperchio
	Bonnet
6	Stelo - Asta - Albero
	Stem

7	Madrevite
	Disc Bushing
8	Anello di tenuta cuneo
	Disc Ring
9	Cuneo
	Disc - Wedge
10	Seggio di tenuta sul corpo
	Seat Ring
11	Corpo
	Body



Outside Screw and Yoke Gate Valve

1	Volantino
	Handwheel
2	Madrevite
	Yoke Nut
3	Cavallotto
	Yoke
4	Premistoppa
	Gland
5	Stoppa
	Stem Packing
6	Coperchio
	Bonnet

7	Stelo - Asta - Albero
	Stem
8	Anello di tenuta cuneo
	Disc Ring
9	Cuneo
	Disc - Wedge
10	Seggio di tenuta sul corpo
	Seat Ring
11	Corpo
	Body

Flat body gate valve in cast Iron PN 16 with flanges PN 10

N. **15100** **inside screw**
 N. **15150** **fast operation**
 lever type

Materials

The body, bonnet, wedge and gland are cast iron
 The wedge and body seal rings are brass
 The stem is brass
 The yoke nut is bronze

Features

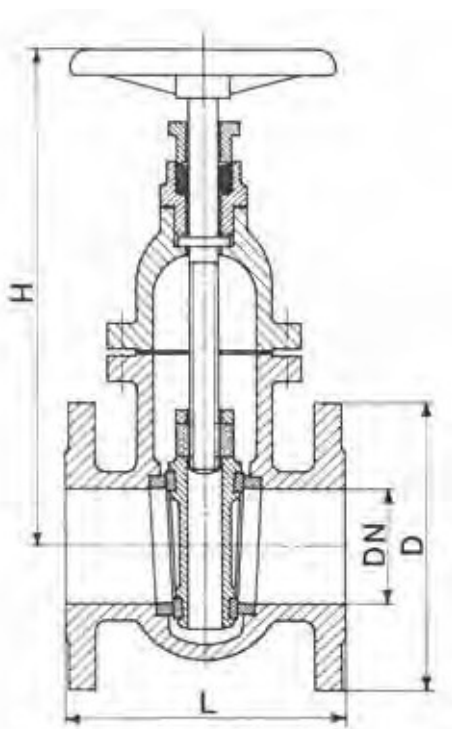
The interception gate valve is specific for water, but also suitable for low pressure steam, oil, fuels, etc.
 Inside screw stem. Sel rings chucked on the wedge and on the body. Constant dimension.
 Negligeable pressure drops with open gate.

The flanges are sized and drilled according to Tables UNI PN 10, with raised face and seal groove.

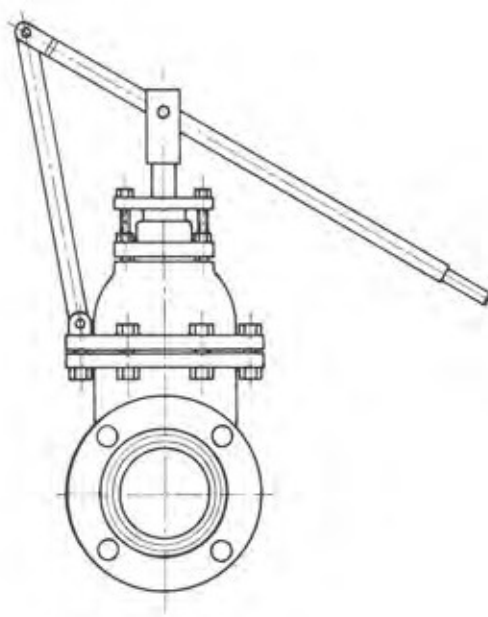
Options

D with handweel scaled control
 X with stainless steel stem and seal seats
 Z with flanges sized and drilled according to Tables UNI PN 6

Art. 15100 15150 PN 6	DN			Test pressure bar		Working pressure bar															
						fino a 120°C						150°C						225°C			
	40-300 350-700	10 4	6 3,2	5 2	2,5 1,6	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600
D	150	165	185	200	220	250	285	315	340	395	445	505	565	615	670	780	895				
L	140	150	170	180	190	200	210	220	230	250	270	290	310	330	350	390	430				
H	220	230	300	310	350	410	430	490	530	640	710	820	920	1010	1110	1270	1450				
≈ kg	11	12	19	22	29	40	53	68	83	120	170	205	260	320	410	680	840				



Art. 15100



Art. 15150

Outside screw Flat body gate valve in cast Iron PN16 with flanges PN 10

Art. 15200

Materials

The body, bonnet, wedge and gland are cast iron
The wedge and body seal rings are brass
The stem is brass
The yoke nut is bronze

Features

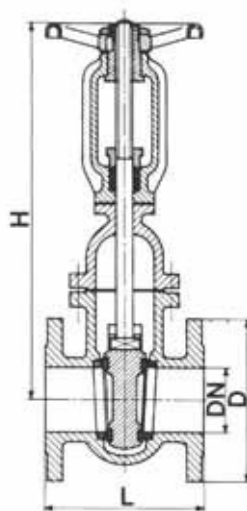
The interceptor gate valve is specific for water, but also suitable for low pressure steam, oil, fuels, etc.
Outside screw stem not in contact with the fluid - fixed handwheel and translating stem - opening degree visual indication - seal rings chucked on the wedge and on the body - Negligeable pressure drops with open gate.

The flanges are sized and drilled according to Tables UNI PN 10, with raised face and seal groove.

Options

D with handwheel scaled control
X with stainless steel stem and seal seats
Z with flanges sized and drilled according to Tables UNI PN 6

Art. 15200	DN			Test pressure bar			Working pressure bar										
							fino a 120°C				150°C				225°C		
PN 6	40-300 350-700			10 4			6 3,2				5 2				2,5 1,6		
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600	700
D	150	165	185	200	220	250	285	315	340	395	445	505	565	615	670	780	895
L	140	150	170	180	190	200	210	220	230	250	270	290	310	330	350	390	430
H	290	310	370	390	470	550	600	700	750	880	1040	1190	1350	1550	1650	1940	2200
≈ kg	12	13	19	21	34	46	56	70	89	128	190	240	300	370	460	790	960



Art. 15200

Flat body gate valve in steel PN 10 with flanged outlets

Tables UNI PN 10, are generally supplied with raised face and seal groove.

N. 15250 **inside screw**
N. 15260 **outside screw**

Materials

The body, bonnet, wedge and gland are steel. The wedge and body seal rings are stainless 18.8. The stem is 13% Cr. stainless steel. The yoke nut is bronze.

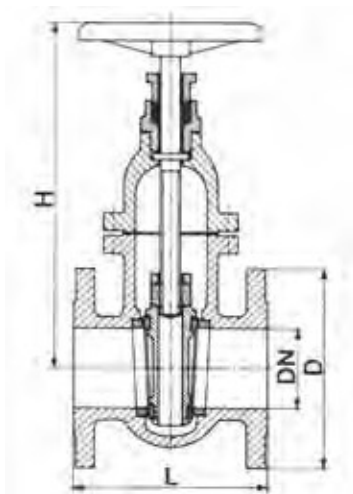
Features

The interception gate valve is suitable for low pressure steam, oil, fuels, water, etc.

Seal rings chucked on the wedge and on the body - negligible pressure drops with the gate valve in the open position.

The flanges, which are sized and drilled according to

Art. 15250 15260 PN 10	DN				Test pressure bar					Working pressure Up to a 120°C bar					For Temperatures Higher than 120°C see Table UNI 1284		
	40-150 175-400 450-700				16 10 6					10 6 4							
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600	700
D	150	165	185	200	220	250	285	315	340	395	445	505	565	615	670	780	895
L	140	150	170	180	190	200	210	220	230	250	270	290	310	330	350	390	430
H	220	230	300	310	350	410	430	490	530	640	710	820	920	1010	1110	1270	1450
≈ kg	11	12	19	22	29	40	53	68	83	120	170	205	260	320	410	680	840



Art. 15250

Outside screw flat body gate valve in steel with flanged outlets

N. 15300 PN 16
N. 15340 PN 40

Materials

These gates valves are obtained from gate valves ANSI.
 The body and bonnet are steel.
 The stem and seal seats are 13% stainless steel.

Features

The interception gate valve is suitable for water, steam, oil fuels gas, etc.
 The bonnet has raised face and it is bolted on the body.
 Outside screw ground stem is not in contact with the fluid. Seal seats screwed on the body and supplied with raised faces for an easy renewal. The wedge is provided with guide bearings for a correct setting on the seat - back sealing for the substitution of the gland gaskets

under pressure, with the gate valve fully opened-fixed handweel and raising stem - gland eye bolts - negligible pressure drops with the open gate.
 The flanges which are sized and drilled according to tables UNI PN 10 are generally supplied with raised face and seal groove.

The interceptor gate valve is specific for water, but also suitable for low pressure steam, oil, fuels, etc.
 Outside screw stem not in contact with the fluid - fixed handwheel and translating stem - opening degree visual indication - seal rings chucked on the wedge and on the body - Negligeable pressure drops with open gate.
 The flanges are sized and drilled according to Tables UNI PN 10, with raised face and seal groove.

Options

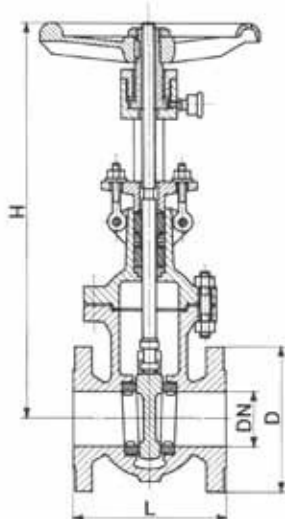
D with handweel scaled control
 Z with flanges sized and drilled according to Tables UNI PN 6

Art. 15300	Test pressure: 25 bar Working pressure: 16 bar a 120°C For other temperature see table UNI 1284														
PN 16															
DN	25*	32*	40	50	65	80	100	125	150	200	250	300	350	400	500
D	115	140	150	165	185	200	220	250	285	340	405	460	520	580	715
L	130	140	165	178	191	203	229	254	267	292	330	356	381	407	457
H	179	222	335	395	430	500	570	600	700	850	1050	1200	1300	1500	1800
≈ kg	5,5	9	13	24	31	40	56	72	87	145	225	295	425	545	865

* For these sizes ask Art. 45400

Art. 15340	Test pressure: 60 bar Working pressure: 40 bar a 120°C For other temperature see table UNI 1284												
PN 40													
DN*	40	50	65	80	100	125	150	200	250	300	350	400	500
D	150	165	185	200	235	270	300	375	450	515	580	660	755
L	191	216	241	283	305	381	403	419	457	502	580	762	838
H	390	435	465	520	610	643	750	960	1100	1300	1420	1580	1920
≈ kg	17	32	44	56	82	122	160	245	365	540	780	1000	1680

* For smaller diameters, see Art. 45410



Art. 15300 - PN 16
15340 - PN 40

Oval body gate valves

N. 15500 **PN 10**
N. 15520 **PN 16**

Inside screw oval body gate valve in cast iron with flanged outlets.

Materials

The body, bonnet, wedge and gland are cast iron - the wedge and body seal rings are brass - the stem is brass - the yoke nut is bronze.

Features

The interception gate valve is specific for conduit , but also suitable for steam, oil, fuels, gas, etc...
 Inside screw stem - seal rings chucked on the wedge

and on the body - constant dimension - negligible pressure drops with open gate.

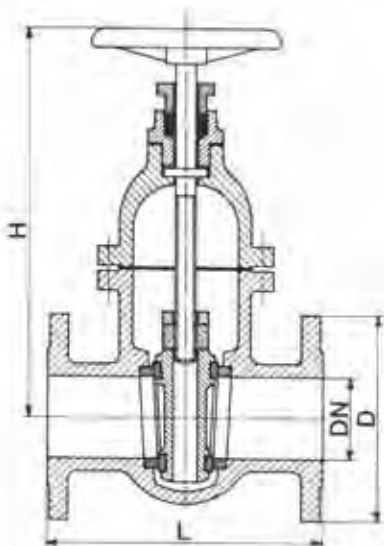
The flanges are sized and drilled according to tables UNI PN10, with raised face and seal groove.

Options

D with handweel scaled control
 X with stainless steel stem and seal seats

Art. 15500	DN			Test pressure bar			Working pressure bar										
							fino a 120°C					150°C			225°C		
PN 10	40-600 oltre 600			16 10			10 6					8 5		4 2,5			
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600	700
D	150	165	185	200	220	250	285	315	340	395	445	505	565	615	670	780	895
L	240	250	270	280	300	325	350	375	400	450	500	550	600	650	700	800	900
H	230	240	310	320	370	430	480	530	600	700	800	860	980	1190	1280	1480	1600
≈ kg	16	18	30	38	51	70	86	110	140	205	245	350	475	590	725	1160	1950

Art. 15520	DN			Test pressure bar			Working pressure bar										
							fino a 120°C					150°C			225°C		
PN 16	40-600 oltre 600			25 16			16 10					12 8		6 4			
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600	700
D	150	165	185	200	220	250	285	315	340	405	460	520	580	640	715	840	910
L	240	250	270	280	300	325	350	375	400	450	500	550	600	650	700	800	900
H	230	240	310	320	370	430	480	530	600	700	800	860	980	1190	1280	1480	1600
≈ kg	24	32	43	50	65	90	115	140	170	235	300	420	565	710	870	1390	2350



Art. 15500 - PN 10
 15520 - PN 16

Outside screw oval body gate valve in cast iron with flanged outlets

N. 15600 PN 10
N. 15620 PN 16

Materials

The body, bonnet, wedge and gland are cast iron. The stem is brass. The wedge and body seal rings are brass - the yoke nut is bronze.

Features

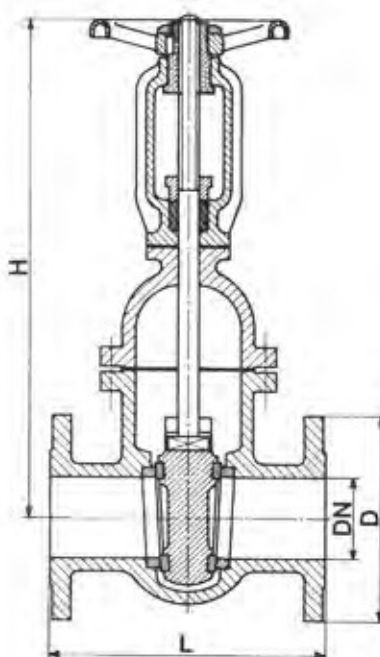
The interception gate valve is specific for water, but also suitable for low pressure steam, oil, fuels, etc. Outside screw stem not in contact with the fluid - fixed handwheel and translating stem - opening degree visual indication - seal rings chucked on the wedge and on the body - Negligeable pressure drops with open gate. The flanges are sized and drilled according to Tables UNI PN 10, with raised face and seal groove.

Options

- D with handweel scaled control
- X with stainless steel stem and seal seats

Art. 15600	DN			Test pressure bar			Working pressure bar										
							fino a 120°C					150°C			225°C		
PN 10	40-600 oltre 600			16 10			10 6					8 5			4 2,5		
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600	700
D	150	165	185	200	220	250	285	315	340	395	445	505	565	615	670	780	895
L	240	250	270	280	300	325	350	375	400	450	500	550	600	650	700	800	900
H	350	365	460	485	550	660	720	800	860	1110	1200	1310	1520	1720	1880	2130	2500
≈ kg	19	21	36	40	60	74	90	125	160	220	300	460	550	850	1000	1450	1800

Art. 15620	DN			Test pressure bar			Working pressure bar										
							fino a 120°C					150°C			225°C		
PN 16	40-600 oltre 600			25 16			16 10					12 8			6 4		
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500	600	700
D	150	165	185	200	220	250	285	315	340	405	460	520	580	640	715	840	910
L	240	250	270	280	300	325	350	375	400	450	500	550	600	650	700	800	900
H	350	365	460	485	550	660	720	800	860	1110	1200	1310	1520	1720	1880	2130	2500
≈ kg	20	27	42	45	60	95	110	160	200	250	400	500	680	1000	1150	1750	2150



Art. 15600 - PN 10
 15620 - PN 16

Inside screw, oval body gate valve in steel with flanged outlets.

N.	15800	PN 16
N.	15810	PN 25
N.	15820	PN 40

Materials

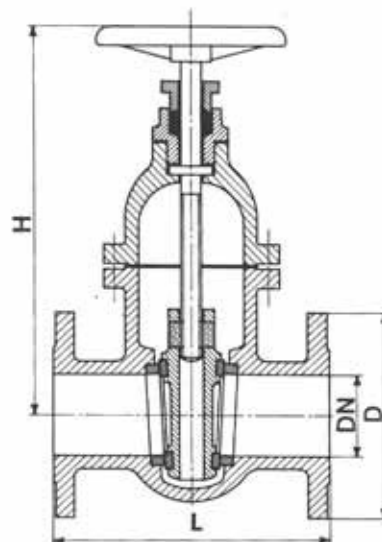
The body, bonnet and wedge are steel - the Stem is 13% Cr. stainless steel . The seal seats are stainless steel 18.8. The yoke nut is bronze.

Features

Non specific employ gate valve suitable for water, steam, oil, fuels, etc.
 Inside screw stem - seal seats on the body and on the wedge - constant dimension - negligible pressure drops with open gate.
 The flanges are sized and drilled according to Tables UNI PN 10, with raised face and seal groove.

Options

- D with handweel scaled control
- F with flexible wedge



Art. 15800 - PN 16
 Art. 15810 - PN 25
 Art. 15820 - PN 40

Art. 15800	DN			Test pressure bar			Working pressure bar							
							fino a 120°C				200°C		300°C	
	40-400 oltre 400			25 20			16 12				13 10		9 7	
DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500
D	150	165	185	200	220	250	285	340	405	460	520	580	640	715
L	240	250	270	280	300	325	350	400	450	500	550	600	650	700
H	230	240	310	320	370	430	480	600	700	800	860	980	1190	1280
≈ kg	15	19	26	31	45	60	84	140	220	345	435	520	850	1080

Art. 15810	DN			Test pressure bar			Working pressure bar								
							fino a 120°C				150°C		225°C		
	40-400 oltre 400			40 32			25 20				20 16		15 12		
DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
D	150	165	185	200	235	270	300	360	425	485	555	620	670	730	845
L	240	250	270	280	300	325	350	400	450	500	550	600	650	700	800
H	240	260	330	350	400	460	520	620	730	840	960	1070	1200	1300	1500
≈ kg	20	25	36	44	60	83	110	180	250	350	500	620	830	1000	1400

Art. 15820	DN			Test pressure bar			Working pressure bar							
							fino a 120°C				150°C		225°C	
	40-400 oltre 400			64 40			40 32				32 25		24 20	
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
D	150	165	185	200	235	270	300	370	450	515	580	660	755	890
L	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
H	240	260	330	350	400	460	520	620	730	840	960	1070	1300	1500
≈ kg	20	25	36	44	60	83	110	180	250	350	500	620	1000	1400

Outside screw oval body gate valve in steel with flanges outlets

N.	15900	PN 16
N.	15910	PN 25
N.	15920	PN 40

Materials

The body, bonnet and wedge are steel - the Stem is 13% cr. stainless steel . The seal seats are stainless steel 18.8 The yoke nut is bronze.

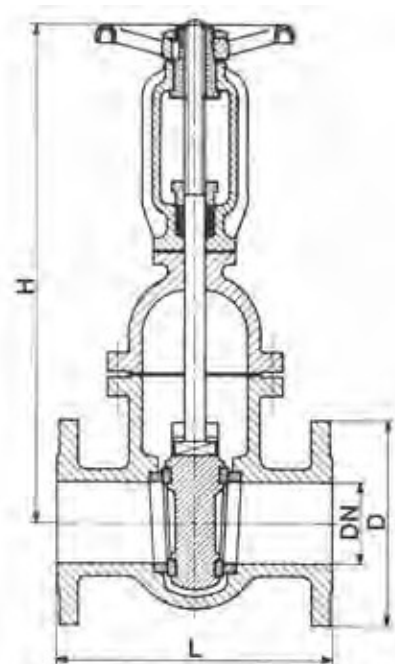
Features

Non specific employ gate valve suitable for water, steam, oil, fuels, etc.

Inside screw stem - seal seats on the body and on the wedge - constant dimension - negligible pressure drops with open gate.

Outside screw stem not in contact with the fluid - seal seats on the body and on the wedge - fixed handwheel and movable stem - opening degree visual indication - negligible pressure drops with open gate.

The flanges are sized and drilled according to Tables UNI PN 10, with raised gage and seal groove



Art. 15900 - PN 16
15910 - PN 25
15920 - PN 40

Art. 15900	DN			Test pressure bar			Working pressure bar							
							fino a 120°C				200°C		300°C	
	40-400 oltre 400			25 20			16 12				13 10		9 7	
DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500
D	150	165	185	200	220	250	285	340	405	460	520	580	640	715
L	240	250	270	280	300	325	350	400	450	500	550	600	650	700
H	350	365	460	485	550	660	720	860	1110	1200	1310	1520	1720	1880
≈ kg	15	19	26	31	45	60	84	140	220	345	435	520	850	1080

Art. 15910	DN			Test pressure bar			Working pressure bar								
							fino a 120°C				200°C		300°C		
	40-400 oltre 400			40 32			25 20				20 16		15 12		
DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
D	150	165	185	200	235	270	300	360	425	485	555	620	670	730	845
L	240	250	270	280	300	325	350	400	450	500	550	600	650	700	800
H	380	390	490	520	580	700	750	900	1150	1240	1350	1560	1760	1920	2150
≈ kg	25	32	44	54	72	96	120	205	280	400	560	680	900	1050	1500

Art. 15920	DN			Test pressure bar			Working pressure bar							
							fino a 120°C				2000°C		300°C	
	40-400 oltre 400			64 40			40 32				32 25		24 20	
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
D	150	165	185	200	235	270	300	370	450	515	580	660	755	890
L	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
H	380	390	490	520	580	700	750	900	1150	1240	1350	1560	1920	2150
≈ kg	25	32	44	54	72	96	120	205	280	400	560	680	1050	1500

Outside screw cylindric body gate valve in cast iron with flanged outlets

N. 16000 PN 16
 N. 16010 PN 25
 N. 16020 PN 40

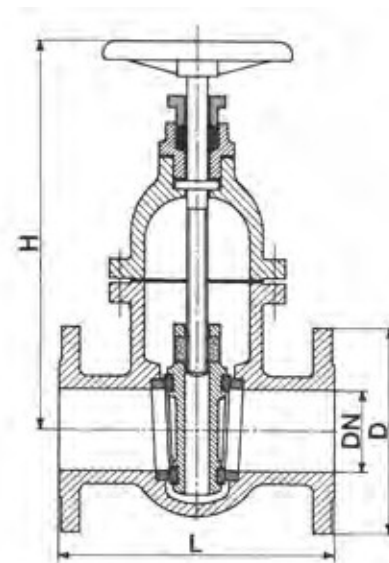
Materials

The body, bonnet, wedge and gland are cast iron.
 The turned and ground stem is high resistance drawn brass. The body and wedge seal seats are brass. The yoke nut is bronze.

Features

The interception gate valve is specific for water, but also suitable for oil, fuels gas, etc.
 Inside screw stem - seal rings chuked on the body and wedge - thick wedge - constant height - negligible pressure drops with fully open gate - normal right-handed locking.

The flanges are sized and drilled according to UNI Tables, with raised face and seal groove.
 Beyond the DN 100, when the gate works under maximum working pressure or the charge on the wedge is not balanced, it is advisable to employ a by-pass or a scaled control.



Art. 16000 - PN 16
 16010 - PN 25
 16020 - PN 40

Art. 16000	DN		Test pressure at open gate valve - bar			Test pressure at closed gate valve - bar			Working Pressure up to 120°C - bar	
	40-400	oltre 400	25			16			16	
PN 16			20			12			12	
DN	200	250	300	350			400		500	
D	340	405	460	520			580		715	
L	460	530	630	690			750		880	
H	350	740	880	950			1060		11180	
≈ kg	180	250	345	460			650		1050	

Art. 16010	DN		Test pressure at open gate valve - bar					Test pressure at closed gate valve - bar				Working Pressure up to 40°C - bar			
	40-400	oltre 400	40					25				25			
PN 25			32					20				20			
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	500	600
D	150	165	185	200	235	270	300	330	360	425	485	555	620	730	845
L	240	250	290	310	350	400	450	500	550	650	750	850	950	1150	1350
H	300	320	350	370	430	480	530	580	640	760	850	970	1100	1350	1600
≈ kg	28	33	42	60	90	120	155	200	250	400	565	750	1100	1950	3000

Art. 16020	DN		Test pressure at open gate valve - bar					Test pressure at closed gate valve - bar				Working Pressure up to 40°C - bar			
	40-400	oltre 400	40					25				25			
PN 40			32					20				20			
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	500	600
D	150	165	185	200	235	270	300	350	375	450	515	580	660	755	890
L	240	250	290	310	350	400	450	500	550	650	750	850	950	1150	1350
H	300	320	350	370	430	480	530	600	660	780	880	990	1130	1350	1600
≈ kg	31	35	50	65	125	152	215	285	335	485	700	925	1250	2100	3500

Outside screw cylindric body gate valve in cast iron with flanged outlets.

N. 16040 **PN 25**
N. 16050 **PN 40**

Materials

The body, bonnet and yoke, wedge and gland are cast iron. The turned and ground stem is high resistance drawn brass. The body and wedge seal seats are brass. The yoke nut is bronze.

Features

The interception gate valve is specific for water, but also suitable for oil, fuels, gas, etc.

Outside screw stem, not in contact with the fluid. Seal rings chucked on the body and wedge - thick wedge - fixed handwheel and translating stem - negligible pressure drops with fully open gate - normal right - handed locking.

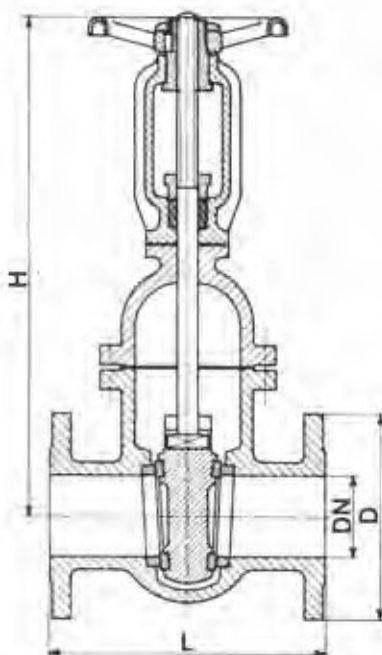
The flanges are sized and drilled according to UNI Tables, with raised face and seal groove.

Options

B with by-pass
D with handwheel scaled control

Art. 16040	DN			Test pressure at open gate valve - bar				Test pressure at closed gate valve - bar				Working Pressure up to 40°C - bar			
	40-400 oltre 400			40 32				25 20				25 20			
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	500	600
D	150	165	185	200	235	270	300	330	360	425	485	555	620	730	845
L	240	250	290	310	350	400	450	500	550	650	750	850	950	1150	1350
H	440	460	540	600	650	760	820	900	1000	1150	1300	1400	1600	2000	2400
≈ kg	33	40	50	70	110	138	170	220	275	440	600	800	1060	1920	3200

Art. 16050	DN			Test pressure at open gate valve - bar				Test pressure at closed gate valve - bar				Working Pressure up to 40°C - bar			
	40-400 oltre 400			60 48				40 32				40 32			
DN	40	50	65	80	100	125	150	175	200	250	300	350	400	500	600
D	150	165	185	200	235	270	300	350	375	450	515	580	660	755	890
L	240	250	290	310	350	400	450	500	550	650	750	850	950	1150	1350
H	440	460	540	600	650	760	820	900	1000	1150	1300	1420	1600	2000	2400
≈ kg	36	43	58	83	135	165	245	300	350	505	725	955	1300	2175	3600



Art. 16040 - PN 25
 16050 - PN 40

Knife gate valve with flanged outlets

N. 16080 manually controlled
N. 16090 with pneumatic operator

Materials

The body is cast iron and the blade is stainless steel.

Features

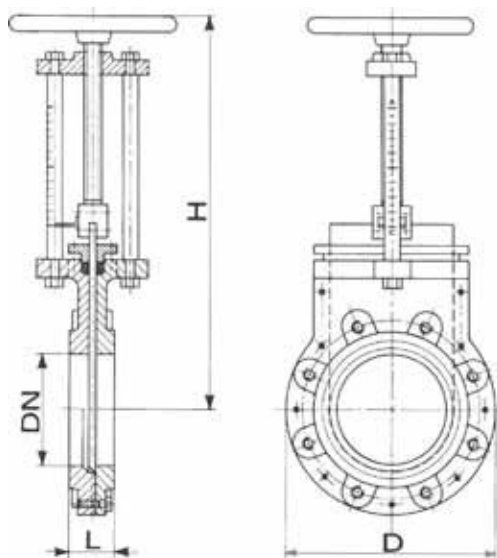
The gate valve is specific for paper mill, sewage or fluids containing fiber materials in suspension, for dusts or granulate materials and for low pressures only. In order to force its way easily during the locking phase,

the blade has cutting lower end. The gland is rectangular and seals on the whole blade which, during the opening phase, gets out of the body. The flanges are sized and drilled according to UNI PN 10 tables with raised face and seal groove, but their holes are thread so that a single flange can be disassembled keeping the gate in work on the other part of the piping. The operator is always double effect. it is air driven and it is equipped with distribution electrovalve and stroke end limit switch.

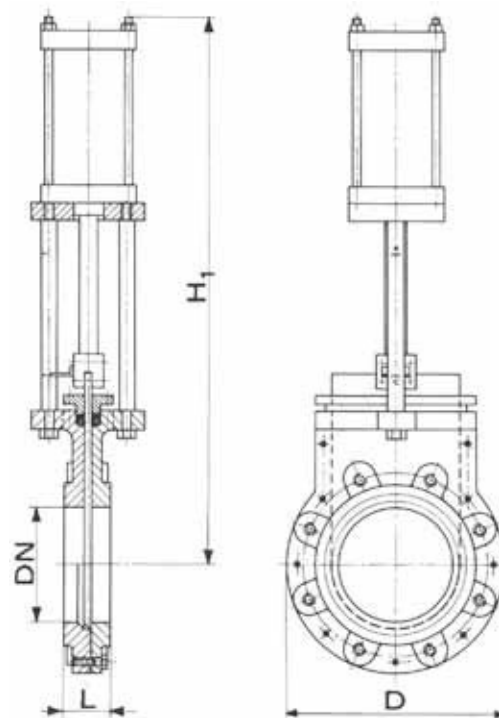
Options

X wholly stainless steel valve

Art. 16080 16090	For low pressures												
DN	50	65	80	100	125	150	200	250	300	350	400	500	600
D	165	185	200	220	250	285	340	395	445	505	565	670	780
L	40	45	45	45	45	50	55	55	55	55	80	90	100
H	340	370	400	430	480	530	640	770	850	970	1100	1330	1550
H ₁	590	700	720	725	890	920	1070	1225	1425	1590	1850	2160	2460



Art. 16080



Art. 16090

Flat-body gate in cast iron PN10 with rubber coated wedge and flanged outlets.

N. 18300

Materials

Body, bonnet and wedge in cast iron - stem in 13% Cr stainless steel - yoke nut in bronze - wedge coating in synthetic rubber.

Features

Inside screw stem - absence of seals seats - gland made up with synthetic rubber OR rings fixed on the body, which practically do not need any maintenance - cylindrical straight passage without discontinuities - negligible pressure drops.

The wedge is fully rubber coated and has a low anti-frost hole for water discharge.

The flanges, sized and drilled according to UNI tables, are usually supplied with raised face and seal groove.

Options

S Nodular cast iron gate.

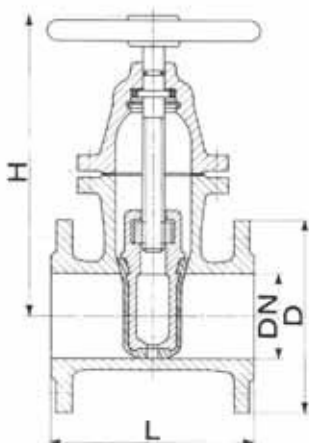
Oval body gates in cast iron with rubber coated wedge and flanged outlets

N. 18400 PN10
N. 18420 PN16

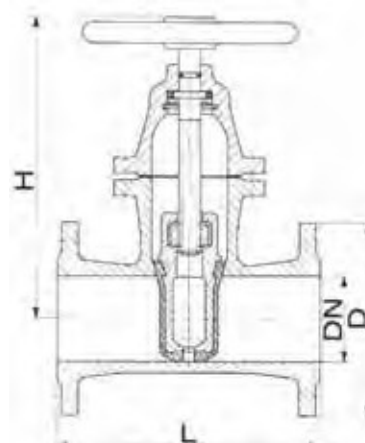
Materials, features and options as per N. 18300

Art. 18300 18400 PN 10		Test pressure: 16 bar Working pressure: 10 bar at 120°C								
DN	40	50	65	80	100	125	150	200	250	300
D	150	165	185	200	220	250	285	340	395	445
L (18300)	140	150	170	180	190	200	210	230	250	270
L (18400)	240	250	270	280	300	325	350	400	450	500
H	220	220	245	275	305	370	410	495	590	680
≈ kg	10	11	15	19	27	40	49	71	105	153

Art. 18420 PN 16		Test pressure: 25 bar Working pressure: 16 bar at 120°C								
DN	40	50	65	80	100	125	150	200	250	300
D	150	165	185	200	220	250	285	340	395	445
L	240	250	270	280	300	325	350	400	450	500
H	220	220	245	275	305	370	410	495	590	680
≈ kg	11	13	17	21	30	43	51	78	105	160



Art. 18300



Art. 18400
18420

Electric actuator gates

The gate can be chosen among various types: inside or outside screw; flat, oval or cylindric body; rubber coated wedge or ANSI type.

Cast iron gates should not be employed with an electric actuator.

Features of electric actuator

The actuator is made up by an electric motor driving a kinematic chain consisting of a first helical gear pair, and a second worm screw/helical gear pair, which drives the operating bushing coupled to the valve stem with hammer-blow device.

The gears, rotating on ball bearings, are bath-lubricated and are contained in a sturdy light-alloy carter.

A torque limiting mechanical device, wich operates efficiency in both flow directions, can be adjusted from 25% to 100% of the actuator output torque, and avoids any possible actuator or valve breaking, in case of accidental overloads during the operation.

The actuator ie equipped with an emergency handwheel with lever clutch and mechanical release actuated by the motor in the start phase.

After having engaged the manual operation, the lever goes back automatically to its rest position, and can also be locked in the two positions in order to avoid possible

unrequested operations.

The handwheel does not rotate while the electric motor is on, and has a gear ratio of 1:1.

All the electric devices (stroke limit switches, supplementary switches, torque limiter, potentiometer for disc position remote signal, anticondensate resistance, terminal board with tags, etc....) are mechanically fixed and electrically connected in a watertight box, on whose lid the mechanical position indicator is mounted.

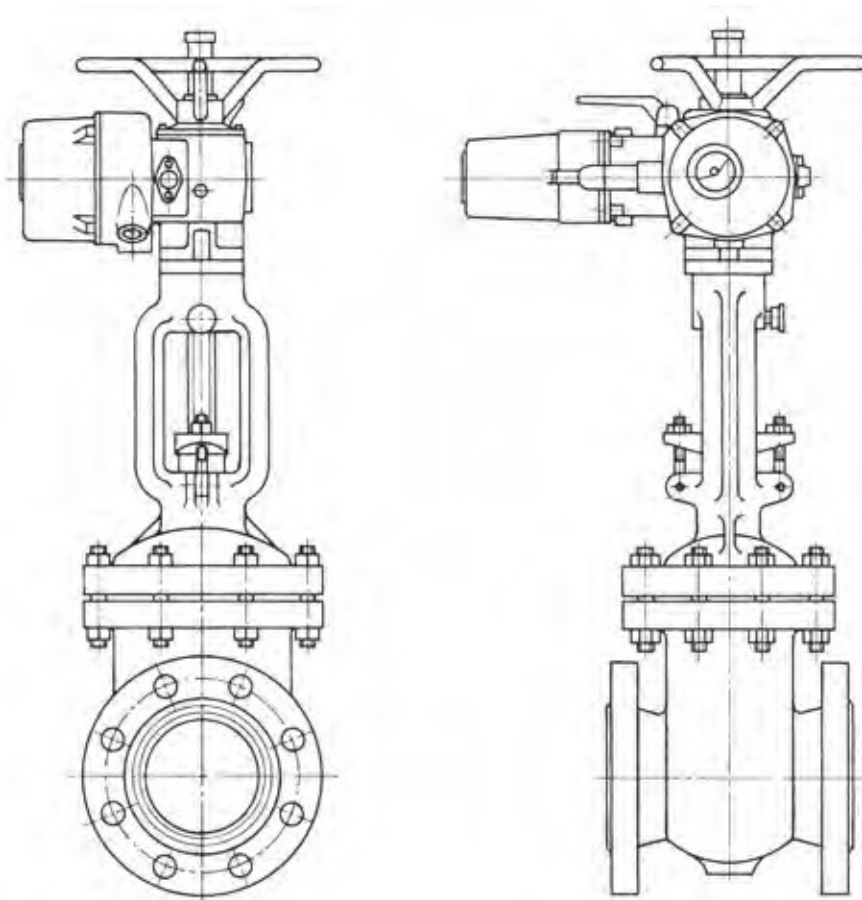
The actuators are supplied in standard type for ambient temperature -20°C to +80°C, with protection degree IP67 (temporary water dipping), according to DIN 40050 and IEC 144 norms.

They are coated with epoxidic primer of polyurethan resin RAL 7030. Moreover, they are supplied equipped with lubricating oil and their coupling unit can be separated from the gearmotor, maintaining the gate in operation.

In the standard version the electric motor is a three-phase asynchronous, insulation class H - rated for service S. 2 - 15 min. according to CEI 2-3 norms. Voltage 380V (+/- 10%), frequency 50 Hz (+/- 5%).

The actuator can properly operate in any assembling position, and its output angular speed range is 6 ### 144 revolutions per minute.

The actuator is suitable to possible control by automatic devices, such as pressure switches, thermostats, clocks, etc.



Outer screw steel gate with electric actuator

On request we can supply:

- Motors for other voltages or frequencies
- Direct current motors
- Explosion-proof type motors for rooms containing explosive gas
- Potentiometer for remote indication of the gate opening degree
- Remote control board, with or without led indicator of the gate opening degree
- Actuators equipped with remote device, suitable for remote control. This device has a control board with locking preselector switch which selects near-remote control or exclusion of any maneuver, and a three-position switch for near control.

Indications to be specified in enquiries

In order to allow our technical office to choose the most

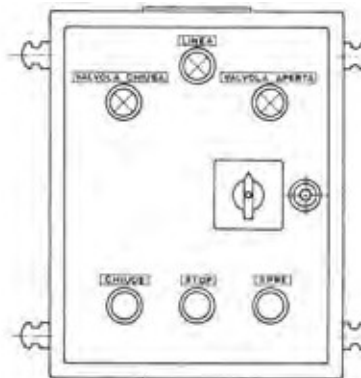
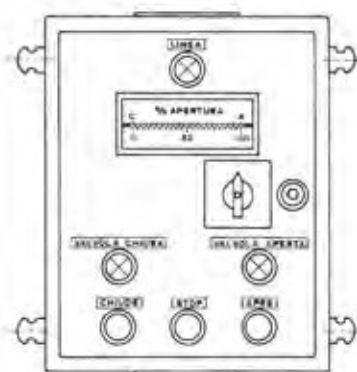
suitable actuator, our customers should always specify the following information:

- fluid type and temperature
- kind of gate chosen
- gate nominal diameter
- maximum differential pressure on the disc (###p)
- required operation time
- type of service (continuous or number of maneuvers per hour)
- supply voltage
- network frequency

Weights and measures

The valves weights and measures will not be supplied until the client has provided all the information above specified

Remote control boards



Actuator Equipped with remote inverter device

