

Gate Valve

## ECOLINE SP/SO

PN 10/16/25  
DN 40-600  
Metal-seated  
Bolted Bonnet  
Flanged Ends

## Type Series Booklet



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Type Series Booklet ECOLINE SP/SO

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## Gate Valves

### Gate Valves with Bolted Bonnet

## ECOLINE SP/SO



#### Main applications

- Domestic water supply
- Air-conditioning systems
- Cooling circuits
- Hot-water heating systems
- Water treatment
- Water supply systems
- District heating

#### Fluids handled

- Cooling water
- Heating water
- High-temperature hot water
- Service water

#### Operating data

Operating properties

Characteristic	Value
Nominal pressure	PN 10/16/25
Nominal size	DN 40-600
Max. permissible pressure	16 bar (ECOLINE SO) 25 bar (ECOLINE SP)
Max. permissible temperature	110 °C

Selection as per pressure/temperature ratings (⇒ Page 4)

#### Body materials

Overview of available materials

Material	Material number	Temperature limit
ECOLINE SP (PN 10/16)		
EN-GJL-250	EN-JL1040	+110 °C
ECOLINE SP (PN 25)		
EN-GJS-400-15	EN-JS1030	+110 °C
ECOLINE SO		
EN-GJL-250	EN-JL1040	+110 °C

#### Design details

##### Design

- Gate valve to UNI EN 1171
- ECOLINE SO with oval body
- ECOLINE SP with flat body
- Maintenance-free stem seal with EPDM O-ring
- Tested to EN 12266-1
- Bolted bonnet
- Internal stem thread
- Rotating stem
- Single-piece wedge

#### Variants

- Larger nominal sizes up to DN 1600
- Gearboxes
- Electric actuators

#### Related documents

- Operating manual V 020625/6

#### On all enquiries / orders please specify

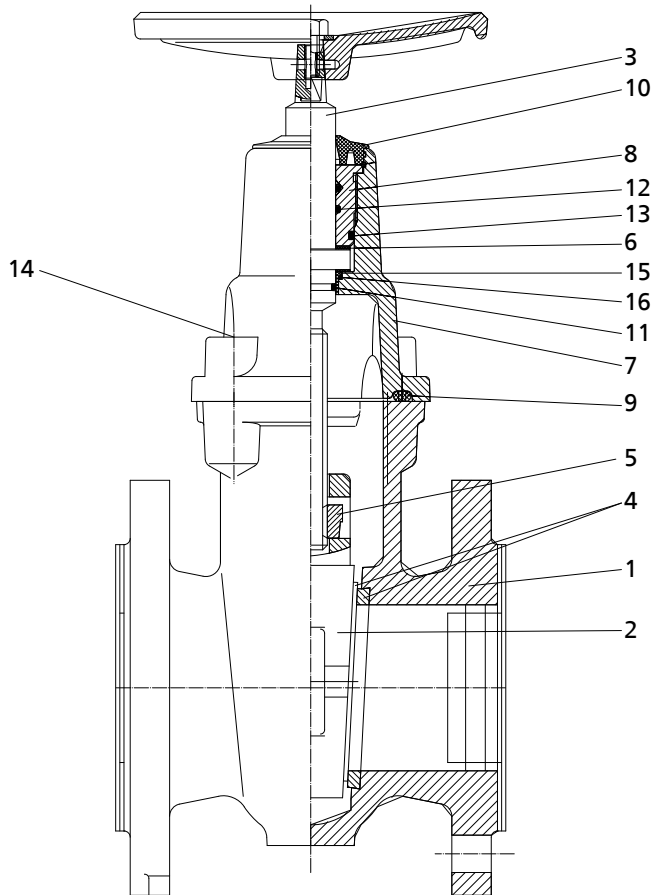
1. Type
2. Nominal pressure
3. Nominal size
4. Variants
5. Number of type series booklet

### Pressure/temperature ratings

Permissible operating pressures in bar at temperatures in °C

Nominal pressure	Nominal size	Permissible operating pressures <sup>1)</sup>
PN	DN	Up to +110 °C
10	40-600	10,0
16	40-300	16,0
25	40-300	25,0

### Materials



#### Overview of available materials

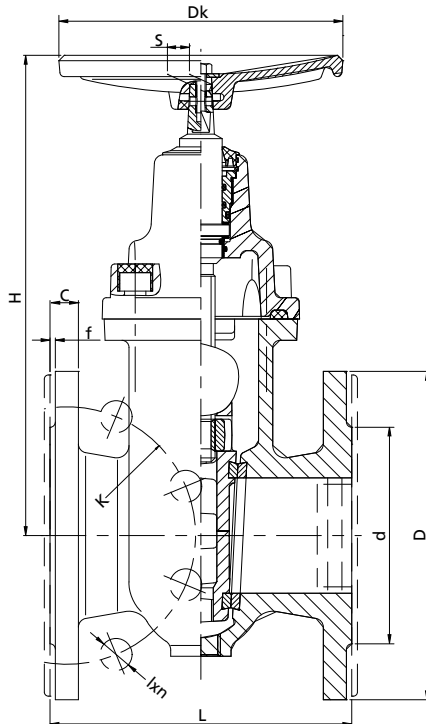
Part No.	Description	Material	Material number	Note
1	Body	EN-GJL-250	EN-JL1040	ECOLINE SO, ECOLINE SP (PN 16)
		EN-GJS-400-15	EN-JS1030	ECOLINE SP (PN 25)
2	Wedge	EN-GJL-250	EN-JL1040	ECOLINE SO, ECOLINE SP (PN 16)
		EN-GJS-400-15	EN-JS1030	ECOLINE SP (PN 25)
3	Stem	X20Cr13	1.4021	
4	Seat	Brass		
5	Stem nut	Brass		
6	Back seat	Tarnamid	T-27	
7	Bonnet	EN-GJL-250	EN-JL1040	ECOLINE SO, ECOLINE SP (PN 16)
		EN-GJS-400-15	EN-JS1030	ECOLINE SP (PN 25)
8	Bush	Brass		

<sup>1)</sup> Static load

Part No.	Description	Material	Material number	Note
9	Joint ring	EPDM		
10				
11	O-ring	EPDM		
12				
13				
14	Screws	Galvanised steel	Fe/Zn5	
15	Back seat	Tarnamid	T-27	
16	O-ring	EPDM		

**Dimensions**

**Dimensions of ECOLINE SP**



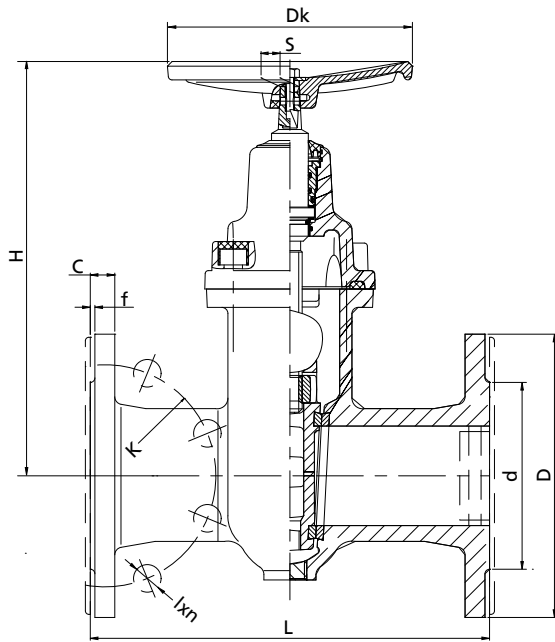
Dimensions in mm

PN	DN	L	H	d	D	K	C	f	l	S	Dk	Left-hand thread	n	[kg]
10/16	40	140	230	88	150	110	18	3	18	14	200	Tr16x4	4	10,6
	50	150	250	102	165	125	20	3	18	14	200	Tr16x4	4	13,9
	65	170	280	122	185	145	20	3	18	17	200	Tr16x4	4	16,5
	80	180	310	138	200	160	22	3	18	17	200	Tr16x4	8	21,4
	100	190	350	158	220	180	24	3	18	19	250	Tr20x5	8	28,2
	125	200	395	188	250	210	26	3	18	19	250	Tr24x5	8	38,3
	150	210	450	212	285	240	26	3	22	19	250	Tr24x5	8	49,1
	200	230	510	268	340	295	26	3	22	24	320	Tr24x5	12	76,1
	250	250	630	320	405	355	28	3	26	27	320	Tr32x6	12	106,0
10	300	270	710	378	460	410	30	4	26	27	320	Tr32x6	12	145,0
	350	290	860	430	505	460	26	4	22	24	320	Tr32x6	16	214,0
	400	310	935	482	565	515	28	4	26	24	320	Tr32x6	16	308,0
	500	350	1135	585	670	620	30	4	26	27	630	Tr40x6	20	432,0
25	600	390	1305	685	780	725	30	5	30	27	630	Tr40x6	20	667,0
	40	140	230	88	150	110	19	3	18	14	200	Tr16x4	4	10,4
	50	150	250	102	165	125	19	3	18	14	200	Tr16x4	4	13,3
	65	170	280	122	185	145	19	3	18	17	200	Tr16x4	4	16,1
	80	180	310	138	200	160	19	3	18	17	200	Tr16x4	8	20,2
	100	190	350	162	235	190	19	3	22	19	250	Tr20x4	8	39,3
	125	200	395	188	270	220	19	3	26	19	250	Tr24x5	8	38,3
	150	210	450	218	300	250	20	3	26	19	250	Tr24x5	8	50,4
	200	230	510	278	360	310	22	3	26	24	320	Tr24x5	12	77,3
250	250	630	335	425	370	25	3	30	27	320	Tr32x6	12	98,1	
300	270	710	395	485	430	28	4	30	27	320	Tr32x6	12	149,0	

**Mating dimensions - Standards**

Face-to-face lengths: EN 558-1/14  
 Flanges: DIN EN 1092-2

**Dimensions of ECOLINE SO**



Dimensions in mm

PN	DN	L	H	d	D	K	C	f	l	S	Dk	Left-hand thread	n	[kg]
10	40	240	230	88	150	110	18	3	18	14	200	Tr16x4	4	12,4
	50	250	250	102	165	125	20	3	18	14	200	Tr16x4	4	16,4
	65	270	280	122	185	145	20	3	18	17	200	Tr16x4	4	19,9
	80	280	310	138	200	160	22	3	18	17	200	Tr16x4	4	26,2
	100	300	350	158	220	180	24	3	18	19	250	Tr20x4	8	36,3
	125	325	395	188	250	210	26	3	18	19	250	Tr24x5	8	50,2
	150	350	450	212	285	240	26	3	22	19	250	Tr24x5	8	60,0
	200	400	510	268	340	295	30	3	22	24	320	Tr24x5	8	99,0
	250	450	630	320	405	350	32	3	22	27	320	Tr32x6	12	136,0
16	40	240	230	88	150	110	18	3	18	14	200	Tr16x4	4	12,4
	50	250	250	102	165	125	20	3	18	14	200	Tr16x4	4	16,4
	65	270	280	122	185	145	20	3	18	17	200	Tr16x4	4	19,9
	80	280	310	138	200	160	22	3	18	17	200	Tr16x4	4	26,2
	100	300	350	158	220	180	24	3	18	19	250	Tr20x4	8	36,3
	125	325	395	188	250	210	26	3	18	19	250	Tr24x5	8	50,2
	150	350	450	212	285	240	26	3	22	19	250	Tr24x5	8	60,0
	200	400	510	268	340	295	30	3	22	24	320	Tr24x5	8	99,0
	250	450	630	320	405	355	32	3	26	27	320	Tr32x6	12	136,0
300	500	710	378	460	410	32	4	26	27	320	Tr32x6	12	162,0	

**Mating dimensions - Standards**

Face-to-face lengths: EN 558-1/15  
 Flanges: DIN EN 1092-2

**Notes on installation**

Gate valves are bi-directional and can be installed in any position. However, the preferred installation position is with the stem pointing vertically upwards.



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