

Gate Valve

COBRA-SGP/SGO/SGF

PN 16/25
DN 25-600
Elastomer-coated Wedge
Bolted Bonnet
Flanged or Threaded Ends

Type Series Booklet



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Type Series Booklet COBRA-SGP/SGO/SGF

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Gate Valves

Gate Valves with Bolted Bonnet

COBRA-SGP/SGO/SGF



Main applications

- Irrigation systems
- Pressure boosting
- Domestic water supply
- Sewage treatment plants
- Air-conditioning systems
- Cooling circuits
- Water treatment
- Water supply systems
- Food and beverages industry

Fluids handled

- Cooling water
- Drinking water
- Fluids containing mineral oils
- Oil
- River, lake and groundwater
- Service water
- Waste water

Operating data

Operating properties

Characteristic	Value
Nominal pressure	PN 16/25
Nominal size	DN 25-600
Max. permissible pressure	25 bar
Max. permissible temperature	70 °C

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

Body materials

Overview of available materials

Material	Material number	Temperature limit
EN-GJS-400-15	EN-JS1030	+70 °C

Design details

Design

- Gate valve to UNI EN 1171
- COBRA-SGP with flat body
- COBRA-SGO with oval body
- COBRA-SGF with threaded ends to ISO 7/1
- COBRA-SGP BS drilled and dimensioned to BS 4504
- Bolted bonnet
- Internal stem thread
- Rotating stem
- Elastomer-coated wedge (NBR)
- Non-toxic elastomer
- Drain plug
- Valve certified for drinking water applications to D.M. 174/2004, WRAS (elastomer and coating) and ACS
- Corrosion protection: electrostatic epoxy resin coating inside and outside; thickness of epoxy coating: 250 µm.

Variants

- Gearboxes
- Electric actuators
- Cap
- Accessories for underground installation
- COBRA-SGF HT (high-temperature applications up to 120 °C)
- EPDM-coated wedge on request.
- Thickness of epoxy coating: 300 µm

Product benefits

- Valve easy to inspect and drain via standard drain plug.
- Approved for drinking water applications due to electrostatic epoxy resin coating
- Pressure drop reduced by hydraulically favourable flow passage of compact valve body without dead volumes.

Related documents

- Operating manual V939011/1.10

On all enquiries / orders please specify

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

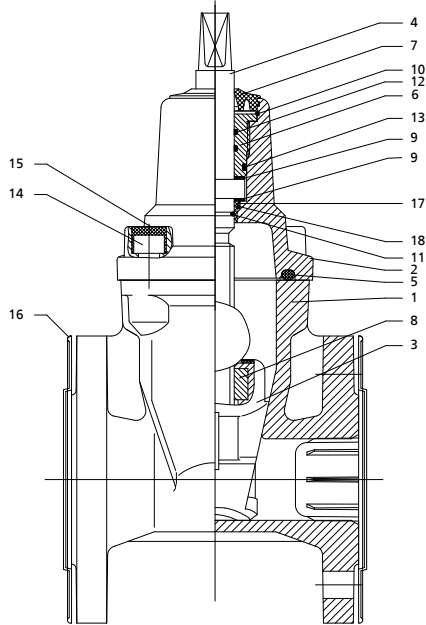
Pressure/temperature ratings

Permissible operating pressures in bar at temperatures in °C

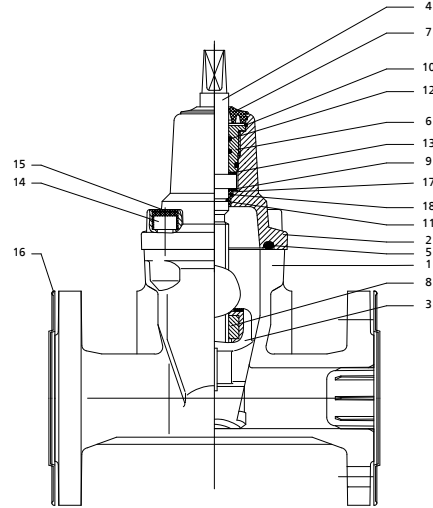
Nominal pressure	Nominal size	Permissible operating pressures ¹⁾
PN	DN	Up to +70 °C
16	25-600	16,0
25	25-300	25,0

Materials

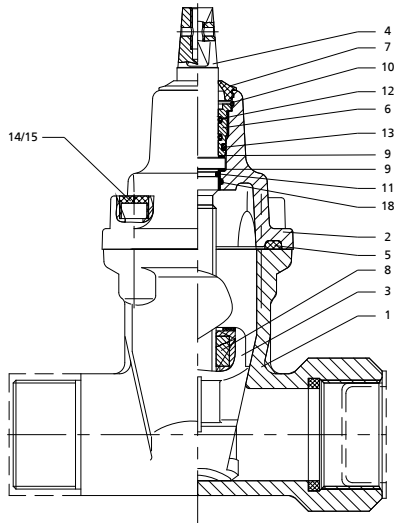
COBRA-SGP



COBRA-SGO



COBRA-SGF



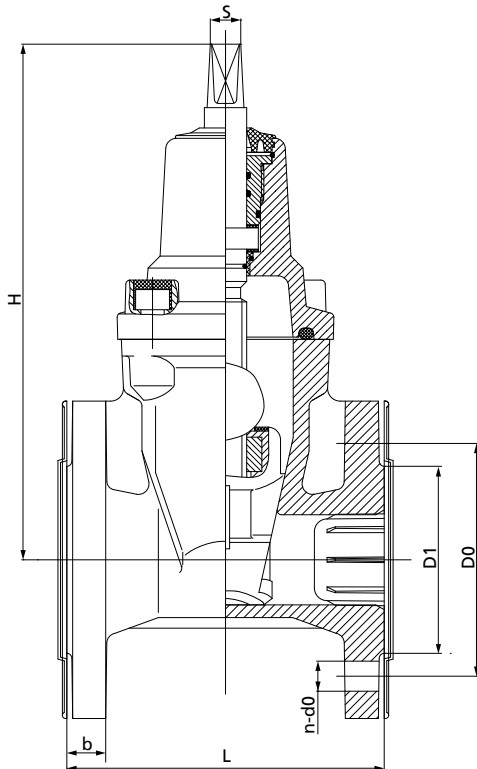
¹⁾ Static load

Overview of available materials

Part No.	Description	Material	Material number	Note
1	Body	EN-GJS-400-15	EN-JS1030	Epoxy-coated
2	Bonnet	EN-GJS-400-15	EN-JS1030	Epoxy-coated
3	Wedge	EN-GJS-400-15	EN-JS1030	Elastomer-coated (NBR/EPDM)
4	Stem	X20Cr13	1.4021	
5	Bonnet gasket	EPDM		
6	Threaded bush	MO59		
7	Plug	EPDM		
8	Stem nut	X5CrNiMo17-12-2	1.4401	
9	Stem washer	Tarnamid	T-27	
10	Circlip	65G		
11	O-ring	EPDM		
12		EPDM		
13		EPDM		
14	Screw	Galvanised steel	Fe/Zn5	
15	Screw cover	Paraffin		
16	Cap	Polypropylene		
17	Stem sleeve	Tarnamid	T-27	
18	O-ring	EPDM		

Dimensions

Dimensions of COBRA-SGP



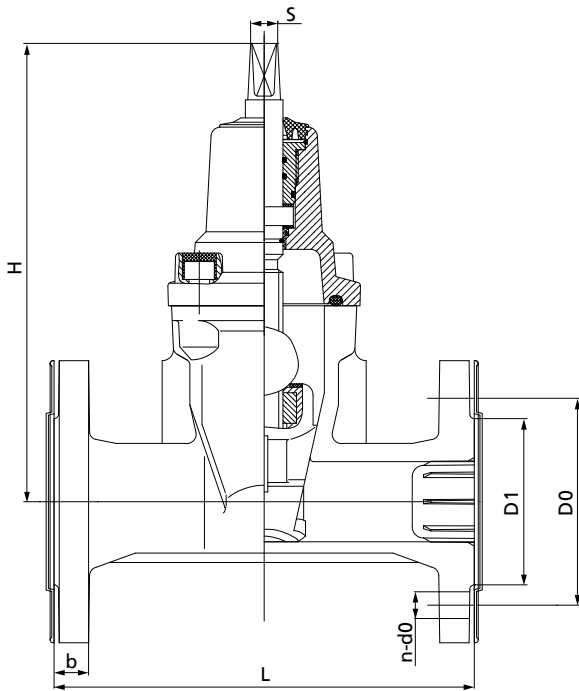
Dimensions in mm

PN	DN	L	H	S	n-d0	b	D1	D0	[kg]
16	40	140	231	14	4-18	19,0	88	110	9,3
	50	150	241	14	4-18	19,0	102	125	11,2
	65	170	283	17	4-18	19,0	122	145	15,8
	80	180	307	17	8-18	19,0	138	160	19,5
	100	190	346	19	8-18	19,0	158	180	25,8
	125	200	385	19	8-18	19,0	188	210	32,2
	150	210	457	19	8-22	19,0	212	240	46,3
	200	230	534	24	12-22	20,0	268	295	65,3
	250	250	633	27	12-26	22,0	320	355	94,0
	300	270	708	27	12-26	24,5	378	410	130,0
	350	290	790	27	12-28	32,0	429	470	200,0
25	40	140	231	14	4-18	19,0	88	110	9,3
	50	150	241	14	4-18	19,0	102	125	11,2
	65	170	283	17	8-18	19,0	122	145	15,8
	80	180	307	17	8-18	19,0	138	160	19,5
	100	190	346	19	8-22	19,0	158	190	25,8
	125	200	385	19	8-26	19,0	188	220	32,2
	150	210	457	19	8-26	20,0	212	250	46,3
	200	230	534	24	12-26	22,0	274	310	65,3
	250	250	633	27	12-30	24,5	330	370	94,0
	300	270	708	27	16-30	27,5	389	430	130,0

Mating dimensions - Standards

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

Dimensions of COBRA-SGO



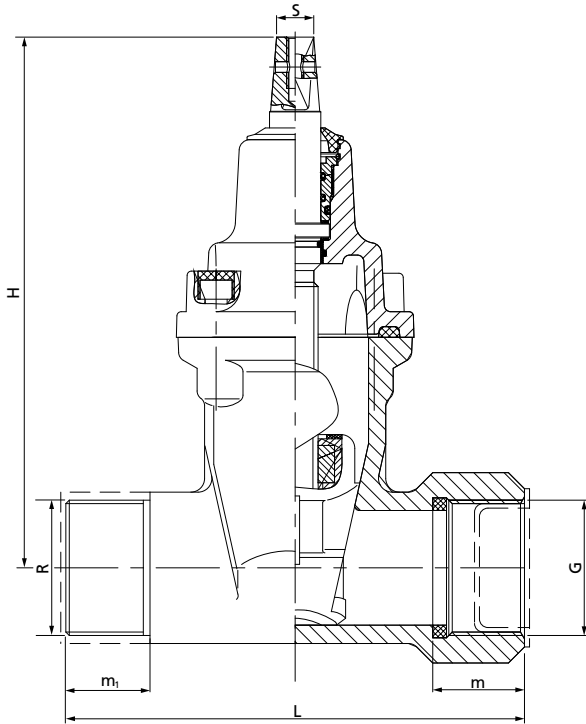
Dimensions in mm

PN	DN	L	H	S	n-d0	b	D1	D0	[kg]
16	40	240	231	14	4-18	19,0	88	110	10,7
	50	250	241	14	4-18	19,0	102	125	12,6
	65	270	283	17	4-18	19,0	122	145	21,2
	80	280	307	17	8-18	19,0	138	160	24,9
	100	300	346	19	8-18	19,0	158	180	29,9
	125	325	385	19	8-18	19,0	188	210	36,7
	150	350	457	19	8-22	19,0	212	240	51,2
	200	400	534	24	12-22	20,0	268	295	81,4
	250	450	633	27	12-26	22,0	320	355	100,0
	300	500	708	27	12-26	24,5	378	410	150,0
	350	550	790	27	12-28	32,0	429	470	232,0
	400	600	1020	32	12-30	32,0	480	525	330,0
25	40	240	231	14	4-18	19,0	88	110	10,7
	50	250	241	14	4-18	19,0	102	125	12,6
	65	270	283	17	8-18	19,0	122	145	21,2
	80	280	307	17	8-18	19,0	138	160	24,9
	100	300	346	19	8-22	19,0	158	190	29,9
	125	325	385	19	8-26	19,0	188	220	36,7
	150	350	457	19	8-26	20,0	212	250	51,2
	200	400	534	24	12-26	22,0	274	310	81,4
	250	450	633	27	12-30	24,5	330	370	100,0
	300	500	708	27	16-30	27,5	389	430	150,0

Mating dimensions - Standards

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

Dimensions of COBRA-SGF



Dimensions in mm

PN	DN	G/R	L	m	m ₁	H	S	[kg]
16	25	1"/1"	105	25	25	145	12	2,3
	32	5/4"/6/4"	120	25	25	145	12	2,8
		5/4"/2"	130	25	25	145	12	2,8
	40	6/4"/6/4"	180	25	40	230	14	6,5
		6/4"/2"	180	25	40	230	14	6,5
	50	2"/2"	200	25	40	240	14	7,7

Mating dimensions - Standards

Face-to-face lengths: see table
Threaded ends: ISO 7/1

Notes on installation

Horizontal installation recommended; vertical installation permitted. Horizontal installation with handwheel below is not recommended.



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