High Temperature Sliding Gate Valve 8023

GS 3 series - 1/2“ up to 10“

Pneumatic sliding gate valve for regulating or shutting off liquid and gaseous media for industrial high temperature applications

- Space-saving wafer-type design
- Lowest possible weight
- Quiet operation
- Fast response
- Control of high differential pressures with small actuators
- Greatly reduced energy consumption rates due to short strokes and low actuating forces on the throttle element
- High Cv-values
- Meets the requirements of TA-Luft 2021

Technical Information

Body design	ANSI flange wafer (self-aligning) for flanges acc. ASME B16.5 RF or DIN EN 1092-1 Form B		
Nominal sizes	1/2“ up to 10“		
Nominal pressure acc. DIN 2401 for flanges with facing type B	580 psi (fits also to 145-365psi)	1/2“ - 6“	
	1450 psi	1/2“ - 3“	
	235 psi	8“ - 10“	
Nominal pressure acc. ANSI for flanges acc. ASME B16.5 RF	ANSI 150	1/2“ - 10“	
	ANSI 300	1/2“ - 6“	
	ANSI 600	1/2“ - 3“	
Nominal pressure acc. JIS for „raised face“ flanges	10K	1/2“ - 2“	
	20K	1/2“ - 1 1/2“	
Supply air pressure	max. 90 psi		
Media temperature	-76°F up to +842°F for function unit carbon-stainless steel		
	-76°F up to +842°F for function unit STN2		
	-76°F up to +572°F for function unit SFC		
	up to +986°F with stainless steel body, bellows from Inconel 625 and function unit STN2		
Ambient temperature*	digital positioner +14°F up to +167°F analog positioner +5°F up to +140°F		
Leakage *	Disc pair	Disc pair	Disc pair
	Carbon-stainless steel	SFC	STN 2
% of Kvs	< 0,0001	< 0,0005	< 0,001
IEC 60534-4	IV-S1	IV-S1	IV
EN 12266-1	E	F	F
Marking ATEX non electric	II 2G Ex h IIC T6…T1 X Gb II 2D Ex h IIIC 85°C…530°C X Db		

* With DN15 with reduction of less than 25%, different leakage rates possible.
K_{vs}-values see data sheet 8001.

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High Temperature
Sliding Gate Valve 8023

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Fluid temperature

Rating	PN40	PN 16	PN 100	ANSI 150	ANSI 300	ANSI 600
Body material cpl. stainless steel						
Tmin [°F]	-76	-76	-76	-20	-20	-20
Tmax [°F]	986	986	986	986	986	986
Body material carbon steel with stainless steel body cover						
Tmin [°F]	-76	-76	14	-4	-4	14
Tmax [°F]	842	842	842	842	842	842

Materials

Body	Stainless steel CF8M		Carbon steelASTM A216 WCB
Bodycover	Stainless stell 316 Ti or 316 L		
Diaphragm housing	Aluminium, KTL coated		
Packing	PTFE (Carbon filled), spring SST 301		
Actuating stem	Stainless steel 316 Ti, roller burnished		
Bellows	Stainless steel 316 Ti		
Fixed disc	Stainless steel 316 Ti, coated		STN2
Sliding disc	Special carbon material	SFC-disc	STN2-disc
Guide ring for sliding disc	Stainless steel 316 Ti		

High Temperature
Sliding Gate Valve 8023-GS3

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Admissible Pressures
(For temperatures of up to 100°F for ANSI-classes and up to 250°F for PN-classes)

For temperatures exeeding 100°F (ANSI) or 250°F (PN): consider operation limits

Disc pair: carbon - stainless steel coated
SFC - stainless steel coated

Diaphragm area	20 in²					40 in²				
Spring range (psi)	3 to 15	15 to 29	22 to 44	26 to 55	30 to 65	3 to 15	12 to 20	17 to 32	20 to 39	25 to 46
Supply air (psi)	17	41	61	75	87,0	17	30	46	58	67
Size	Admissible differential pressures in psi									
1/2“	65	1480	1480	1480	1480	275	1480	1480	1480	1480
3/4“	55	1480	1480	1480	1480	240	1480	1480	1480	1480
1“	45	1276 (1450)*	1276 (1450)*	1276 (1450)*	1276 (1450)*	200	1276 (1450)*	1276 (1450)*	1276 (1450)*	1276 (1450)*
1 1/4“	40	1450	1480	1480	1480	165	1480	1480	1480	1480
1 1/2“	30,0	955	1276 (1450)*	1276 (1450)*	1276 (1450)*	125	1276 (1450)*	1276 (1450)*	1276 (1450)*	1276 (1450)*
2“	-	520	825	1015	1220	85	915	1405	1480	1480
2 1/2“	-	420	655	810	970	70	740	1130	1160	1160
3“	-	245	375	480	565	45	435	655	695	695
4“	-	145	230	290	350	-	260	390	480	480
5“	-	95	145	190	220	-	175	260	320	335
6“	-	75	110	130	160	-	125	190	230	230
8“	-	35	65	80	95	-	75	110	130	145
10“	-	25	40	50	60	-	30	70	85	95
Springconfigu-ration	Code D	Code 2	Code 3	Code 4	Code 5	Code D	Code 2	Code 3	Code 4	Code 5

Standard
*: figures in brackets for bodys of carbon steel

	Pressure limits ANSI and DIN in psi					
	ANSI150	ANSI 300	ANSI 600	PN16	PN40	PN100
P max. carbon steel	284	741	1480	232	580	1450
P max. stainless steel	276	719	1440			

Disc pair: STN 2

Diaphragm area	20 in²					40 in²				
Spring range (psi)	3 to 15	15 to 29	22 to 44	26 to 55	30 to 65	3 to 15	12 to 20	17 to 32	20 to 39	25 to 46
Supply air (psi)	17	44	64	78	87	17	32	48	58	70
Size	Admissible differential pressures in psi									
1/2“	45	1450	1450	1450	1450	195	1450	1450	1450	1450
3/4“	35	825	1450	1450	1450	150	1450	1450	1450	1450
1“	25	825	1275	1275 (1450)*	1275 (1450)*	110	1275 (1450)*	1275 (1450)*	1275 (1450)*	1275 (1450)*
1 1/4“	20	550	855	1060	1260	85	955	1450	1450	1450
1 1/2“	15	335	535	655	785	55	595	915	1045	1045
2“	-	190	290	365	435	35	335	510	610	710
2 1/2“	-	145	230	290	350	30	260	405	495	580
3“	-	85	130	160	205	15	145	230	275	335
4“	-	50	80	100	125	-	95	145	175	205
5“	-	35	50	65	80	-	60	95	115	130
6“	-	20	35	50	60	-	45	65	80	95
8“	-	15	25	30	25	-	25	40	50	55
Springconfigu-ration	Code D	Code 2	Code 3	Code 4	Code 5	Code D	Code 2	Code 3	Code 4	Code 5

Standard
*: figures in brackets for bodys of carbon steel

	Pressure limits ANSI and DIN in psi					
	ANSI150	ANSI 300	ANSI 600	PN16	PN40	PN100
P max. carbon steel	284	741	1480	232	580	1450
P max. stainless steel	276	719	1440			

The supply air pressure stated in the table is the minimum supply air pressure that has to be available. This is valid for use without a positioner. When utilizing a positioner the required supply air pressure is determined by the adjustment of the positioner. For the standard version it is 60 psi. The spring configuration „D“ allows the usage of a control valve without a positioner but with limited performance. The valve can be controlled directly by a process controller with a signal of 3 to 15 psi.

High Temperature
Sliding Gate Valve 8023-GS3

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Ordering Number System

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8	0	2	3	/				V	Q					M								Z			S

Type: 8023 / — Size: — Symbol: "V": Valve; "R": Repair kit (sealings)

1 - 5 : Please quote all 5 sections.
6 - 16: Quote only if required.

1.	Function	2.	Body design	3.	Body materials	4.	Pilot function	5.	Actuator	6.	Special versions
P	sliding gate valve with pneumatic actuator (8020)	E	GS3 - flangeless design acc. ANSI 150	0	Carbon-Steel ASTM A216 WCB	0	spring to close	6	Diaphragm actuator 20 in² (NPT)	M	to state, if some sections 7-16 are quoted
		F	GS3 - flangeless design acc. ANSI 300	1	Stainless Steel CF8M	1	spring to open	7	Diaphragm actuator 40 in² (NPT)		
		K	GS3 - flangeless design acc. ANSI 600								
		G	GS3 - flangeless design acc. DIN, (145psi - 580 psi)								
		H	GS3 - flangeless design acc. DIN, 1450 psi								

7.	Springs	8.	Stem sealing	9.	Sliding disc	10.	Fixed disc	11.	Cv-values	12.	Flow characteristic
-	Standard	-	PTFE-V-shaped seal, self-adjusting (standard)	-	carbon material	-	Stainless steel/Stellite	-	100 % (Stand.)	-	linear
1	2 springs			B	carbon material fibre forced	1	STN 2 - plate (only in combination with the position „9“)	A	red. to 63 %	1	equal percentage
2	4 springs							1	red. to 40 %		
3	6 springs							B	red. to 25 %		
4	8 springs					3	STN 3 - plate (only in combination with the position „9“)	2	red. to 16 %		
5	10 springs	1	Additional stainless steel bellow 316 Ti	9	STN2/STN3			C	red. to 10%		
D	Set of springs 3 -15 psi (4 springs)			S	Stainless Steel SFC-coated			3	red. to 6,3 %		
								4	red. to 2,5 %		
								5	red. to 1 %		
								6	red. to 20%		
								7	red. to 12%		
								8	red. to 2%		
								9	red. to 0,4 %		

13.	Accessories	14.	Positioner	15.	Signalling equipment	16.	Special version
Z	To state, if in sections 14 and 15 accessories are quoted	-	without	-	without	S	Other special versions have to be quoted in letters
		1	p/p - without gauges	0	2 limit switches inductive, M12x1 10-30 V DC PNP		
		2	p/p - with gauges	1	2 limit switches inductive, integr. in positioner		
		3	i/p - without gauges	2	i/p-converter		
		4	dto. with gauges				
		6	i/p - intrinsically without gauges	5	2 limit switches inductive, M 12x1 10-55 V DC PNP/NPN		
		7	dto. with gauges				

Ordering Example: 8023/080VQE103M4 - - - - - Z3
sliding gate valve with pneumatic actuator, 3“ , flangeless design acc. ANSI 150, stainless steel 316 Ti, spring to close, actuator diaghragm 20 in², 8 springs, PTFE-V-shaped sealing, function unit carbon-stainless steel 316 Ti coated, flow characteristic linear, i/p-positioner ex-proof

High Temperature
Sliding Gate Valve 8023-GS3

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Application limitations for GS3 valves in stainless steel

These pressure must not be exceeded for GS-valves from the GS3-series made of stainless steel, even though the actuator power might allow it.

PN40

Size	Sliding unit: carbon/SFC - stainless steel, coated maximum pressures for GS3-valves in stainless steel (psi)							
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“	580	580	580	580	580	580	580	580
3/4“	580	580	580	580	580	580	580	580
1“	580	580	580	580	580	580	580	550
1/2“ - 1 1/4“	580	580	580	580	580	580	580	580
1 1/2“	580	580	580	580	580	580	580	550
2“	580	580	580	580	580	580	580	580
2 1/2“	580	580	580	580	580	580	580	580
3“	580	580	580	580	580	580	580	505
4“	475	475	475	475	475	475	475	475
5“	475	475	475	475	475	475	475	475
6“	230	230	230	230	230	230	230	230
8“ (only 235psi)	230	230	220	190	175	160	145	130
10“ (only 235psi)	145	130	130	115	100	85	85	70

Size	Sliding unit: STN2 maximum pressures for GS3-valves in stainless steel (psi)									
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F	930°F	990°F
1/2“	580	580	580	580	580	580	580	580	565	450
3/4“	580	580	580	580	580	580	580	580	480	390
1“	580	580	580	580	580	580	580	550	375	305
1/2“ - 1 1/4“	580	580	580	580	580	580	580	580	435	350
1 1/2“	580	580	580	580	580	535	465	420	375	305
2“	580	580	580	580	580	580	510	450	405	375
2 1/2“	580	580	580	580	535	465	405	365	320	305
3“	520	495	480	375	320	275	230	205	190	175
4“	465	450	435	350	290	245	220	190	175	160
5“	305	305	275	230	190	160	145	115	115	100
6“	220	220	205	160	130	115	100	85	75	75
8“ (only 235psi)	120	110	100	80	65	55	45	40	35	35
10“ (only 235psi)	-	-	-	-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

PN100

Size	Sliding unit: carbon/SFC - stainless steel, coated maximum pressures for GS3-valves in stainless steel (psi)							
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“	1450	1450	1450	1350	1220	1145	1075	800
3/4“	1450	1450	1290	1175	1060	985	930	695
1“	1275	1175	1015	915	825	785	740	550
1 1/4“	1450	1350	1160	1060	945	900	840	625
1 1/2“	1275	1175	1015	915	825	785	740	550
2“	1450	1450	1450	1450	1450	1365	1260	1100
2 1/2“	1160	1160	1160	1145	1030	970	915	680
3“	695	695	695	695	695	640	595	510

Size	Sliding unit: STN2 maximum pressures for GS3-valves in stainless steel (psi)									
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F	930°F	990°F
1/2“	1450	1450	1450	1350	1220	1145	1075	800	565	450
3/4“	1450	1450	1290	1175	1060	985	930	695	480	390
1“	1275	1175	1015	915	825	785	740	550	375	305
1 1/4“	1450	1350	1160	1060	945	870	755	625	435	350
1 1/2“	1045	1000	945	770	625	535	465	420	375	305
2“	1115	1060	1015	810	665	580	510	450	405	375
2 1/2“	900	855	810	655	535	465	405	365	320	305
3“	520	495	480	375	320	275	230	205	190	175

Limitation for SFC-sliding discs: 570°F

High Temperature
Sliding Gate Valve 8023-GS3

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ANSI150

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in stainless steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“ - 5“	275	265	235	215	200	175	150	120	95	65
6“	230	230	230	215	200	175	150	120	95	65
8“	230	230	230	215	200	175	150	120	95	65
10“	150	150	150	145	135	120	105	100	90	65

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in stainless steel											
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F	930°F	990°F
1/2“ - 5“	275	265	235	215	200	175	150	120	95	65	30	-
6“	235	235	235	215	200	170	140	120	95	65	30	-
8“	150	145	120	110	100	80	65	55	45	40	30	-
10“	-	-	-	-	-	-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

ANSI300

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in stainless steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-2 1/2“	720	695	610	560	520	485	460	440	425	420
3“	695	695	610	560	520	485	460	440	425	420
4“	480	480	480	480	480	480	460	440	425	420
5“	335	335	335	335	335	335	335	335	335	335
6“	230	230	230	230	230	230	230	230	230	230
8“	230	230	220	200	180	155	140	130	120	110

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in stainless steel											
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F	930°F	990°F
1/2“	720	695	610	560	520	485	460	440	425	420	400	375
3/4“	720	695	610	560	520	485	460	440	425	420	400	375
1“	720	695	610	560	520	485	460	440	425	420	385	315
1 1/4“	720	695	610	560	520	485	460	440	425	420	400	360
1 1/2“	720	695	610	560	520	485	460	440	425	420	385	315
2“	720	695	610	560	520	485	460	440	425	420	400	375
2 1/2“	720	695	610	560	520	485	460	440	410	365	330	315
3“	530	530	530	505	480	390	320	275	240	215	195	180
4“	480	480	480	460	435	355	290	250	220	195	175	165
5“	320	320	320	305	290	235	190	165	145	130	115	110
6“	230	230	230	225	210	170	140	120	105	95	85	80
8“	150	145	120	110	100	80	65	55	45	40	35	35

Limitation for SFC-sliding discs: 570°F

ANSI600

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in stainless steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“	1440	1395	1225	1115	1035	970	915	880	865	810
3/4“	1440	1395	1225	1115	1035	970	915	880	865	700
1“	1275	1275	1225	1115	1015	925	830	785	740	550
1 1/4“	1440	1395	1225	1115	1035	970	915	880	850	630
1 1/2“	1275	1275	1225	1115	1015	925	830	785	740	550
2“	1440	1395	1225	1115	1035	970	915	880	865	835
2 1/2“	1160	1160	1160	1115	1035	970	915	880	865	690
3“	695	695	695	695	695	695	695	645	595	515

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in stainless steel											
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F	930°F	990°F
1/2“	1440	1395	1225	1115	1035	970	915	880	865	810	565	460
3/4“	1440	1395	1225	1115	1035	970	915	880	865	700	490	400
1“	1275	1275	1225	1115	1015	925	830	785	740	550	385	315
1 1/4“	1440	1395	1225	1115	1035	970	915	875	765	630	440	360
1 1/2“	1050	1050	1050	1000	950	770	630	545	475	425	385	315
2“	1125	1125	1125	1070	1020	825	675	585	510	455	410	390
2 1/2“	905	905	605	865	820	665	545	470	410	365	330	315
3“	530	530	530	505	480	390	320	275	240	215	195	185

Limitation for SFC-sliding discs: 570°F

High Temperature
Sliding Gate Valve 8023-GS3

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Application limitations for GS3 valves in carbon steel

These pressure must not be exceeded for GS-valves from the GS3-series made of carbon steel, even though the actuator power might allow it.

PN40

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in carbon steel							
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-1 1/4“	580	580	580	580	580	580	580	580
1 1/2“	580	580	580	580	580	580	580	580
2“	580	580	580	580	580	580	580	580
2 1/2“	580	580	580	580	580	580	580	580
3“	580	580	580	580	580	580	580	550
4“	480	480	480	480	480	475	475	475
5“	335	335	335	335	335	330	330	330
6“	230	230	230	230	230	230	230	230
8“ (only PN16)	230	230	220	190	175	155	145	140
10“ (only PN16)	145	130	130	115	100	85	85	75

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in carbon steel							
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-1 1/4“	580	580	580	580	580	580	580	580
1 1/2“	580	580	580	580	580	580	460	420
2“	580	580	580	580	580	580	505	450
2 1/2“	580	580	580	580	535	460	405	360
3“	520	495	480	375	320	275	230	200
4“	480	450	435	350	290	245	215	190
5“	320	305	275	230	190	155	145	115
6“	230	220	205	160	130	115	100	85
8“ (only PN16)	120	110	100	80	65	55	45	40
10“ (only PN16)	-	-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

PN100

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in carbon steel							
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“	1450	1450	1450	1450	1450	1450	1350	1030
3/4“	1450	1450	1450	1450	1450	1450	1450	1160
1“	1450	1450	1450	1450	1365	1260	1170	900
1 1/4“	1450	1450	1450	1450	1450	1435	1350	1040
1 1/2“	1450	1450	1450	1450	1365	1260	1170	910
2“	1450	1450	1450	1450	1450	1360	1260	1175
2 1/2“	1160	1160	1160	1160	1160	1100	1010	940
3“	695	695	695	695	695	635	595	550

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in carbon steel							
	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“	1450	1450	1450	1450	1450	1450	1350	1030
3/4“	1450	1450	1450	1450	1450	1450	1450	1160
1“	1450	1450	1450	1450	1365	1260	1100	900
1 1/4“	1450	1450	1450	1220	1000	870	750	665
1 1/2“	1045	1000	945	770	625	535	460	420
2“	1115	1060	1015	810	665	580	505	450
2 1/2“	900	855	810	655	535	460	405	360
3“	520	495	480	375	320	275	230	200

Limitation for SFC-sliding discs: 570°F

High Temperature
Sliding Gate Valve 8023-GS3

SCHUBERT SALZER

ANSI 150

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in carbon steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-5“	285	280	255	230	200	175	150	120	90	65
6“	230	230	230	230	200	175	150	120	90	65
8“	230	230	230	230	200	175	150	120	90	65
10“	150	150	150	145	135	120	105	87	90	65

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in carbon steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-5“	285	280	255	230	200	175	150	120	90	65
6“	235	235	235	225	200	170	140	115	90	65
8“	150	145	120	110	100	65	65	55	50	40
10“	-	-	-	-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

ANSI 300

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in carbon steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-1“	740	725	675	655	635	610	577	580	500	330
1 1/4“	740	725	675	655	635	610	285	580	500	330
1 1/2“	740	725	675	655	635	610	285	580	500	330
2“	740	725	675	655	635	610	285	580	500	330
2 1/2“	740	725	675	655	635	610	285	580	500	330
3“	695	695	675	655	635	610	285	580	500	330
4“	480	480	480	480	480	480	285	475	330	330
5“	335	335	335	335	335	335	285	330	330	330
6“	230	230	230	230	230	230	230	230	230	230
8“	230	230	220	200	180	155	140	130	120	110

Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in carbon steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-1“	740	725	675	655	635	610	577	545	500	330
1 1/4“	740	725	675	655	635	610	577	545	500	330
1 1/2“	740	725	675	655	635	610	577	545	475	330
2“	740	725	675	655	635	610	577	545	500	330
2 1/2“	605	605	605	575	545	485	545	470	410	330
3“	530	530	530	505	480	390	319	275	240	210
4“	480	480	480	460	435	355	290	245	215	190
5“	320	320	320	305	290	235	191	155	145	125
6“	230	230	230	225	210	170	141	115	105	90
8“	150	145	120	110	100	65	65	55	45	40

Limitation for SFC-sliding discs: 570°F

ANSI 600

Size	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves in carbon steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-1“	1480	1455	1350	1310	1270	1215	1155	1085	1000	665
1 1/4“	1480	1455	1350	1310	1270	1215	1155	1085	1000	665
1 1/2“	1450	1450	1350	1310	1270	1215	1155	1085	1000	665
2“	1450	1450	1350	1310	1270	1215	1155	1085	1000	665
2 1/2“	1160	1160	1160	1160	1160	1160	1155	1085	1000	665
3“	695	695	695	695	695	695	695	635	595	555

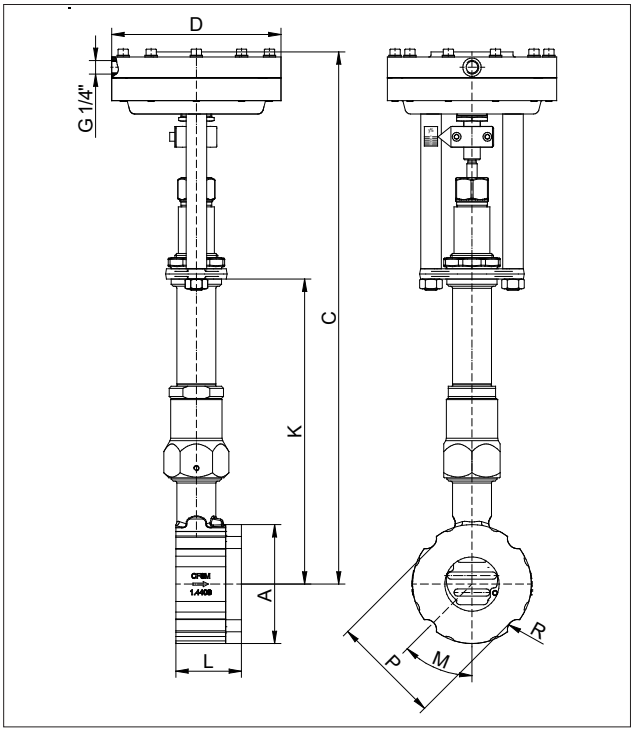
Size	Sliding unit: STN2 max. admissible pressures for GS3-valves in carbon steel									
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	750°F	840°F
1/2“-1“	1480	1455	1350	1310	1270	1215	1155	1085	1000	665
1 1/4“	1480	1455	1350	1310	1270	1215	1010	870	760	665
1 1/2“	1050	1050	1050	1000	950	770	630	535	475	420
2“	1125	1125	1125	1070	1020	825	675	580	510	450
2 1/2“	905	905	905	865	820	665	545	460	410	365
3“	530	530	530	535	480	390	320	275	240	210

Limitation for SFC-sliding discs: 570°F

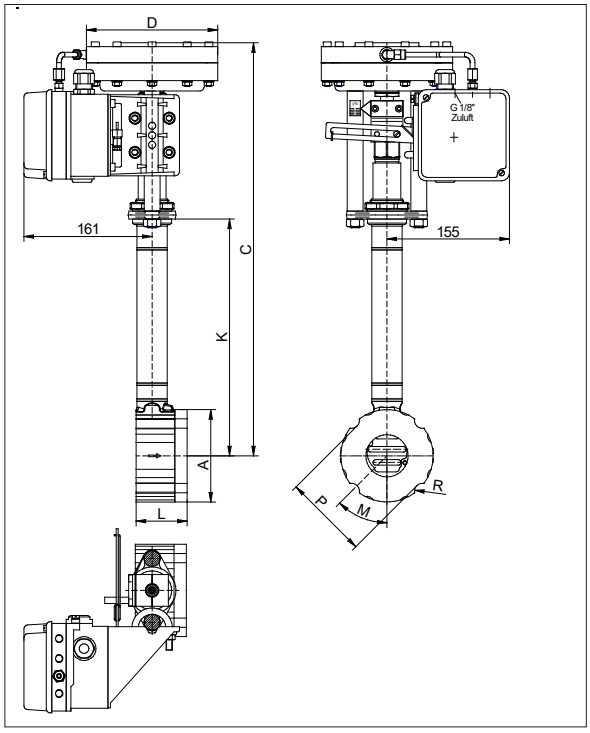
High Temperature
Sliding Gate Valve 8023-GS3

SCHUBERT SALZER

Dimensions and Weights



without positioner



with electropneumatic positioner

Size	A inch	C inch	Ø D actuator size 20 in²	Ø D actuator size 40 in²	K inch	L inch	Weight lbs actuator size 20 in²	Weight lbs actuator size 40 in²	Stroke inch
1/2"	2.5	19.5	6.5	8.75	10.7	2.2	16.5	21.3	0.25
3/4"	2.85	19.7	6.5	8.75	10.85	2.2	16.9	21.8	0.25
1"	3.25	19.9	6.5	8.75	11.05	2.2	18	22.9	0.25
1 1/4"	3.5	20.1	6.5	8.75	11.15	2.2	18.7	23.5	0.25
1 1/2"	3.9	20.3	6.5	8.75	11.4	2.2	19.8	24.2	0.25
2"	4.55	20.65	6.5	8.75	11.7	2.5	23.1	28.6	0.3
2 1/2"	5.45	21.05	6.5	8.75	12.05	2.7	27.5	33	0.3
3"	6	21.45	6.5	8.75	12.4	2.75	29.7	35.2	0.3
4"	7.25	21.85	6.5	8.75	12.9	2.95	36.3	41.8	0.35
5"	8.35	22.45	6.5	8.75	13.5	3.15	42.9	48.4	0.35
6"	9.55	23.05	6.5	8.75	14	3.15	50.6	55	0.35
8"	11.9	24.2	6.5	8.75	15.1	3.65	88	92.4	0.35
10"	14.15	25.2	6.5	8.75	16.15	3.8	100.1	104.5	0.35

Dimensions in inch

High Temperature
Sliding Gate Valve 8023-GS3
Flow Coefficients - Cv-values

Ordering code		-	A	1	B	6	2	7	C	3	4	8	5	9
Size	Charact.	100 %	63 %	40 %	25 %	20%	16 %	12 %	10 %	6,3 %	2,5 %	2 %	1 %	0,4%
1/2“	(mod.) linear	4.6	3	2	1.6	-	0.82	0.57	0.51	0.3	0.16	0.09	0.05	0.021
	eq. perc.	2	-	1.3	-	0.4	-	-	-	0.12	-	-	-	-
3/4“	(mod.) lin.	7.4	-	-	-	-	1.16	-	-	-	-	0.15	-	-
	eq. perc.	3.5	-	1.7	-	-	-	-	-	-	-	-	-	-
1“	(mod.) linear	13	7.4	4.6	-	-	1.9	-	1.08	0.72	0.3	-	0.16	0.05
	eq. perc.	5.8	-	2.8	-	1.3	-	-	-	0.41	-	-	-	-
1 1/4“	(mod.) linear	19	12	-	-	-	-							
	eq. perc.	9.3	5.45	-	-	-	-							
1 1/2“	(mod.) lin.	30	19	13	8.1	-	-							
	eq. perc.	13	9.9	-	3.2	-	-							
2“	(mod.) linear	52	32	23	14	12	-							
	eq. perc.	22	14	-	-	-	3.5							
2 1/2“	(mod.) linear	60	41	-	17									
	eq. perc.	35	-	-	9.3									
3“	(mod.) linear	107	67	46										
	eq.perc.	56	41	-										
4“	(mod.) linear	179	110	72										
	eq.perc.	89	56	-										
5“	(mod.) linear	275	-	110										
	eq.perc.	135	-	-										
6“	(mod.) linear	392	246	-										
	eq.perc.	171	104	-										
8“	(mod.) linear	650	408	-										
	eq.perc.	329	-	-										
10“	(mod.) linear	1056	667											
	eq.perc.	-												