

Motor Valve 8035

GS 3 series, DN 15 up to DN 250
Version NR2 with safety spring return

SCHUBERT & SALZER
CONTROL SYSTEMS

TÜV-approval according DIN 32730
for the pressure ratings PN40,
ANSI150 and ANSI 300



Technical Information

Design	Flangeless design further versions see data sheet 8030-GS1		
Nominal size	DN 15 up to DN 250		
Nominal pressure acc. DIN 2401 for flange with facing type B	PN 40 (fits also to PN 10-25)	DN 15 - DN 150	
	PN 100	DN 15 - DN 80	
Nominal pressure acc. ANSI for flanges acc. ASME B16.5 RF	PN 16	DN 200 - DN 250	
	ANSI 150	DN 15 - DN 250	
	ANSI 300	DN 15 - DN 150	
Nominal pressure acc. JIS for "raiced face" flanges	ANSI 600	DN 15 - DN 80	
	10K	DN 15 - DN 50	
Media temperature	20K	DN 15 - DN 40	
	Carbon steel body	-10°C up to +300°C	
Rangeability	Stainless steel body	-60°C up to +350°C (+300°C for SFC)	
Leakage (% of Kvs)	30 : 1	Disc pair	Disc pair
		Carbon-stainless steel	SFC
		< 0,0001	< 0,0005
			Disc pair
			STN 2
			< 0,001

Kvs-values see data sheet 8001.

TÜVRheinland®
TA-Luft zertifiziert

Technical Information Motor Actuator

Actuating force	1,2 kN	3,0 kN
Type of duty acc. VDE 0530 with control electronics	S 4 - 30% ED	S 4 - 30% ED
without control electronics	S 1 - 100 % ED	S 1 - 100 % ED
Net connections	24 V AC	24 V AC
	110 V/120 V AC	110 V/120 V AC
	230 V AC	230 V AC
Mounting position	motor not top-down	motor not top-down
Protection class	IP 54 (IP65 optional)	IP 54 (IP65 optional)
Power consumption 24V	21 W	21 W
Power consumption 230V	21 W	21 W
Power consumption 110 V/120 V	21 W	21 W
Stroking time at line break	2,9 - 3,5 sec.	2,9 - 3,5 sec.
Manual operation	by push buttons (electrical power required)	

Materials

Body	Stainless steel 1.4571 /1.4581	Carbon steel 1.0570 /1.0619
Head section	Stainless steel 1.4571 /1.4581	Carbon steel 1.0570 /1.0619
Packing	PTFE (carbon filled), spring 1.4310	
Actuating stem	Stainless steel, roller burnished	
Bellow	Stainless steel 1.4571	
Fixed plate	Stainless steel 1.4571, plated	STN2-disc
Sliding disc	Standard: special carbon material	SFC-disc
Coupling ring for discs	STN2-disc	STN2-disc
	Stainless steel 1.4581	

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Stroking Times

DN	Stroking times (sec.) with stroking speed	
	17,5 mm/min	3,4 mm/min
15	21	110
20	21	110
25	21	110
32	21	110
40	21	110
50	28	146
65	28	146
80	28	146
100	30	154
125	30	154
150	30	154
200	30	154
250	30	154

Options

	actuating force	
	1,2 kN	3 kN
limit switches	max. 2	max. 2
potentiometer	max. 2*	max. 2*
Nachlaufregler (analog)	yes	yes

* one potentiometer is required for positioner operation

Admissible Differential Pressure (For temperatures of up to 120°C)

**For temperatures of 120°C and above:
obey application limits !**

DN	1,2 kN	3,0 kN	1,2 kN	3,0 kN
	max. differential pressures (bar)			
	Disc pair			
	carbon/SFC-stainless steel		STN 2	
15	100	100	76	100
20	93	100	58	100
25	78	100	44	100
32	64	100	32	86
40	48	100	22	59
50	31	84	13	35
65	26	70	11	29
80	17	45	6,5	17
100	10	28	4	10
125	7	19	2,5	7
150	5	14	2	5
200	3	8	-	-
250	2	5,2	-	-

	Upper limits for admissible pressures in bar					
	PN16	PN40	PN100	ANSI 150	ANSI 300	ANSI 600
P max.	16	40	100	16	40	80

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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.

PN 40

DN	Sliding unit: carbon/SFC - stainless steel, coated max. admissible diff. pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
15 - 65	40	38	34	32	31	29
80	40	38	34	32	31	29
100	33	31	29	27	25	24
125	23	21	20	19	18	17
150	16	15	14	13	12	12
200 (PN16 only)	16	15	14	13	12	11,0
250 (PN16 only)	10,5	10	9,5	8,4	7,4	6,9

DN	Sliding unit: carbon - STN2 max. admissible diff. pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
40	40	38	34	32	31	29
36	36	34	33	26	22	19
33	33	31	26	24	20	17
22	22	21	17	16	13	11
16	16	15	13	11	9	8
-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 300°C

PN 100

DN	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
15	100	95	87	82	77	72
20	100	95	87	82	77	72
25	100	95	87	82	77	72
32	100	95	87	82	77	72
40	100	95	87	82	77	72
50	100	95	87	82	77	72
65	80	76	72	67	62	60
80	48	45	43	40	37	36

DN	Sliding unit: STN2 max. admissible pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
100	100	95	87	82	77	72
100	100	95	87	82	77	72
100	100	95	87	82	77	72
100	100	95	87	82	69	60
72	72	69	65	53	43	37
77	77	73	70	56	46	40
62	62	59	56	45	37	32
36	36	34	33	26	22	19

Limitation for SFC-sliding discs: 300°C

ANSI #150

DN	Sliding unit: carbon/SFC - stainless steel, coated max. admissible diff. pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
15 - 125	16	15	13	12	10	8
150	16	15	13	12	10	8
200	16	15	13	12	10	8
250	10,5	10	9,5	8,4	7,4	6,9

DN	Sliding unit: carbon - STN2 max. admissible diff. pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
16	16	15	13	12	10	8
16	16	15	13	11	9,5	8
-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 300°C

ANSI #300

DN	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures in bar for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
15 - 65	40	38	35	33	31	30
80	40	38	35	33	31	30
100	33	31	29	27	25	24
125	23	21	20	19	18	17
150	16	15	14	13	12	12

DN	Sliding unit: STN2 max. admissible pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
40	40	38	35	32	31	29
36	36	34	33	26	22	19
33	33	31	26	24	20	17
22	22	21	17	16	13	11
16	16	15	13	11	9	8

Limitation for SFC-sliding discs: 300°C

ANSI #600

DN	Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
15 - 32	80	77	71	66	63	60
40	80	77	71	66	63	60
50	80	77	71	66	63	60
65	80	76	71	66	62	60
80	48	45	43	40	37	36

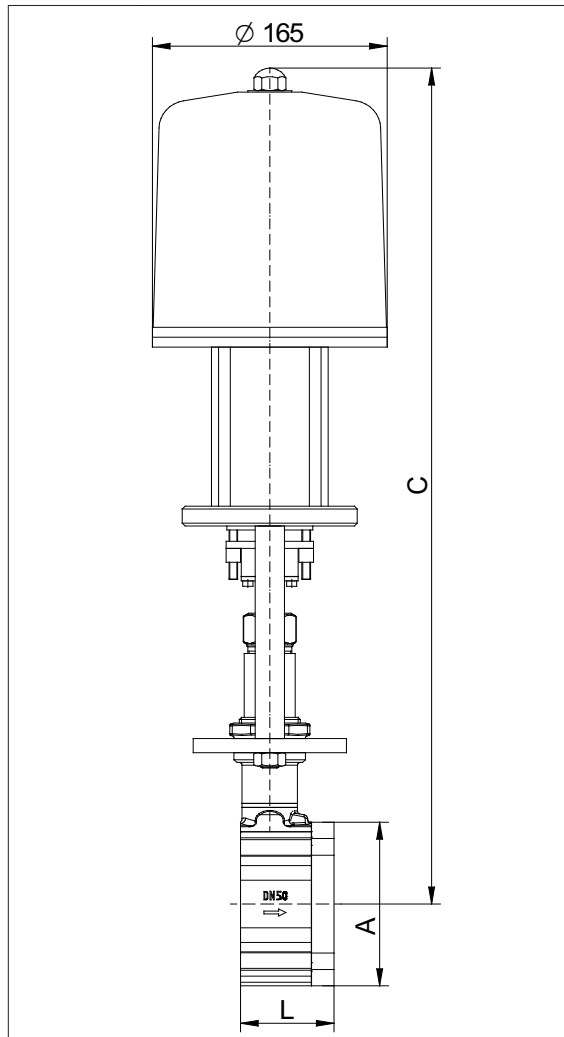
DN	Sliding unit: STN2 max. admissible pressures for GS3-valves					
	100°C	150°C	200°C	250°C	300°C	350°C
80	80	77	71	66	63	60
72	72	69	65	53	43	37
77	77	73	70	56	46	40
62	62	59	56	45	37	32
36	36	34	33	26	22	19

Limitation for SFC-sliding discs: 300°C

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Dimensions and Weights



DN	ØA	C* 1.2 kN	C* 3.0 kN	L	Weight kg	Stroke
15	64	570	590	56	12,2	6
20	72	575	595	56	12,4	6
25	82	580	600	56	12,7	6
32	89	585	605	56	12,9	6
40	99	590	610	56	13,2	6
50	116	600	620	64	14,7	8
65	138	610	630	68	16,2	8
80	153	615	635	70	17,4	8
100	184	630	650	75	20,6	8,5
125	212	645	665	80	22,9	8,5
150	242	660	680	80	26,7	8,5
200	302	690	710	93	43,6	8,5
250	360	715	735	96	49,1	8,5

* For the motor actuator with integrated positioner C increases for 40 mm

Dimensions in mm