

High Pressure Control Valve 8021 SCHUBERT & SALZER

with integrated positioner

GS 4 series; DN 25 up to DN 250



Pneumatic control valve for the control of neutral and aggressive fluids at high operative pressures with integrated positioner

- Space saving screwed wafer type construction
- Compact version, low weight
- Quiet operation
- High dynamic because of small stroke
- Control of high differential pressures with small actuators
- Low energy consumption
- High Kvs-values
- Long lifetime also with cavitation operation

Technical Information

Design	screwed wafer-type design for flanges acc. DIN EN 1092-1 Form B further versions see data sheet 8021-GS1 and -GS3	
Nominal Sizes*	DN 25 - 250	
Nominal pressure acc. DIN 2401*	PN160 PN 100 PN 40	DN 25 - DN 80 DN 100 - DN 150 DN 200 - DN 250
Nominal pressure ANSI*	ANSI 900 ANSI 600 ANSI 300	DN 25 - DN 80 (1" - 3") DN 100 - DN 150 (4" - 6") DN 200 - DN 250 (8" - 10")
Mounting position	Any mounting position for installation in horizontal pipes Not in rising pipes	
Fluid Temperature	-60°C up to +350°C **	
Ambient Temperature ***	-30°C up to +100°C	
Rangeability / Characteristic: digital Positioner	40 : 1 linear / 80:1 equalpercentage	
Leakage	Disc pair STN 2	
% from Kvs IEC 60534-4 EN 12266-1	< 0,001 IV E	
Specific leakage rate shaft and body sealing	ISO FE-BH-CC3-SSA0-t(-40°C/+350°C)-PN40-ISO 15848-1	

* other pressure ratings on demand

** higher temperatures on demand

*** Please consider the temperature limitation of the positioner!

Kvs- and Cv-values see data sheet 8001.



Accessories

- Bellow
- Stroke feedback
- Positioner (Ex ib IIC6)

Materials

Valve body	stainless steel 1.4571
Head section	stainless steel 1.4571
Diaphragm casing	aluminium, KTL-coated
Actuator springs	stainless steel 1.4310
Packing	carbon-filled PTFE (spring 1.4310)
Valve stem	stainless steel 1.4122 or 1.4571, roller burnished
Fixed disc	STN2-disc
Sliding disc	STN2-disc

*further materials such as hastelloy, duplex-steel, monell, titan, inconell, incoloy, 1.4539 etc. on request

Positioner

For technical information of our positioners please refer to the corresponding data sheets.

High Pressure Control Valve 8021



Differential pressures

Admissible differential pressures

For temperatures of up to 120°C (PN) / 38°C (ANSI)
with integrated digital positioner, Type 8049
also on-off valves and valves with other side-mounted positioner

For temperatures of 120°C for PN-ratings and 38°C for ANSI-ratings and above: obey application limits!

Actuator size	1000 cm ²			1500 cm ²		
	Supply pressure (bar)	3,8	4,9	5,5	3,4	4
DN	max. admissible pressure in bar					
25	160	160	160	160	160	160
50	115	159	160	160	160	160
80	61	84	93	87	102	112
100	39	53	59	55	65	71
150	19	26	29	27	32	35
200	11	15,5	17	16	18,5	20
250	6,9	9,6	10,5	9,9	11,5	12,5
Spring configuration	Code L	Code „-“	Code P	Code L	Code „-“	Code P

Standard

Differential pressures

Application limitations for GS4 valves in stainless steel

These pressure must not be exceeded for GS-valves from the GS4-series made of stainless steel, even though the actuator power might allow it. Applications for dangerous gases acc. pressure equipment directive 2014/68/EU category III (DN > 100; PS x DN > 3500) only after consultation.

PN160

DN	Sliding unit: SFC - stainless steel, coated max. admissible pressures for GS4-valves						Sliding unit: STN2 max. admissible pressures for GS4-valves					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
25	160	147	127	115	104	-	160	147	127	115	104	98
50	160	147	127	115	104	-	160	147	127	115	104	98
80	160	147	127	115	104	-	160	147	127	115	104	98

PN100

DN	Sliding unit: SFC - stainless steel, coated max. admissible pressures for GS4-valves						Sliding unit: STN 2 max. admissible pressures for GS4-valves					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
100	100	92	79	72	65	-	100	92	79	72	65	61
150	100	92	79	72	65	-	66	36	31	28	26	24

PN40

DN	Sliding unit: SFC - stainless steel, coated max. admissible pressures for GS4-valves						Sliding unit: STN 2 max. admissible pressures for GS4-valves					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
DN200	40	36	31	28	26	-	38	36	31	28	26	24
DN250	40	36	31	28	26	-	23	23	23	19	17	14

ANSI 900 (ASME B16.34 - 316L)*

DN	Sliding unit: SFC - stainless steel, coated max. admissible pressures for GS4-valves						Sliding unit: STN 2 max. admissible pressures for GS4-valves					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
25	132,7	122,9	114,9	108,1	102,4	-	132,7	122,9	114,9	108,1	102,4	97,8
50	132,7	122,9	114,9	108,1	102,4	-	132,7	122,9	114,9	108,1	102,4	97,8
80	132,7	122,9	114,9	108,1	102,4	-	132,7	122,9	114,9	108,1	102,4	97,8

*: ASME B16.34 rating depends on the valve body material. Other materials and ratings on demand.

ANSI 600 (ASME B16.34 - 316L)*

DN	Sliding unit: SFC - stainless steel, coated max. admissible pressures for GS4-valves						Sliding unit: STN 2 max. admissible pressures for GS4-valves					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
100	62,8	58,3	54,9	52,1	51	-	62,8	58,3	54,9	52,1	51	49,5
150	62,8	58,3	54,9	52,1	51	-	62,8	36,0	31,0	28,0	26,0	24,0

*: ASME B16.34 rating depends on the valve body material. Other materials and ratings on demand.

ANSI 300 (ASME B16.34 - 316L)*

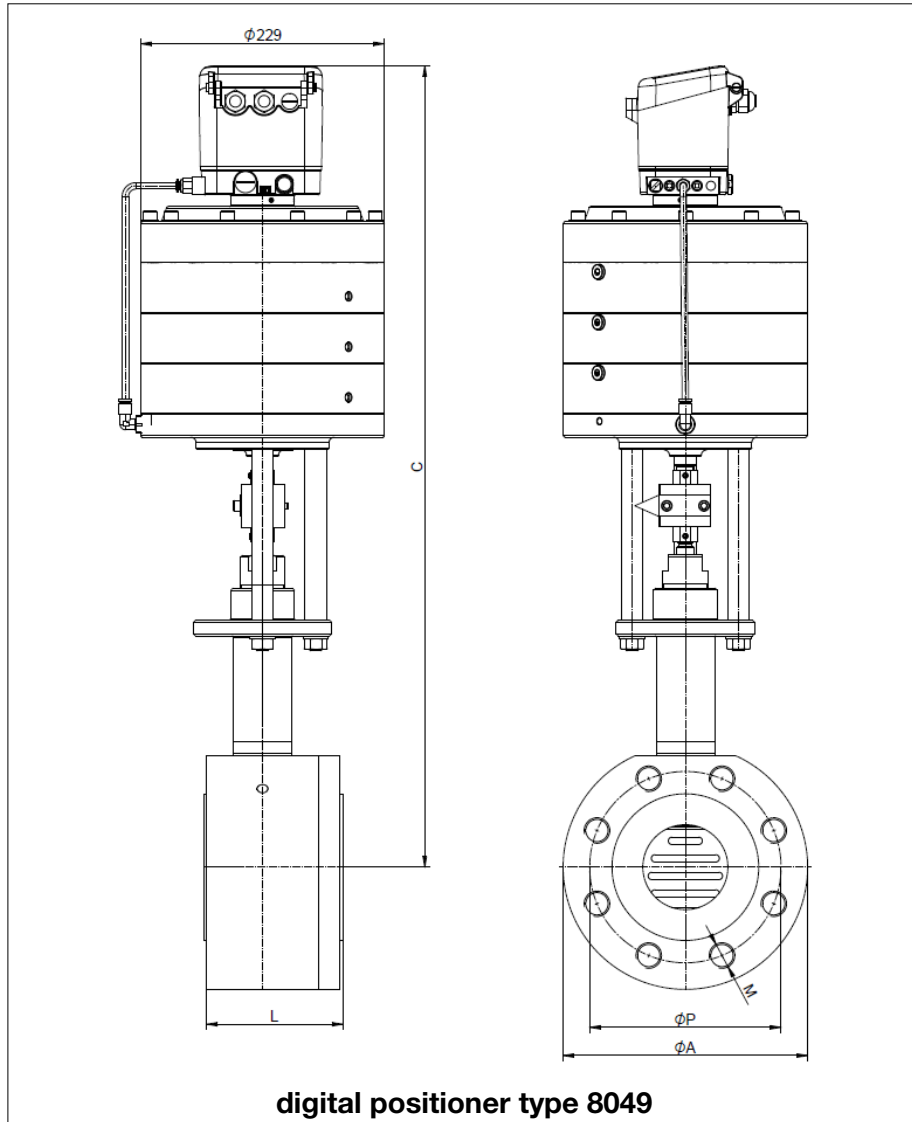
DN	Sliding unit: SFC - stainless steel, coated max. admissible pressures for GS4-valves						Sliding unit: STN 2 max. admissible pressures for GS4-valves					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
DN200	31,4	29,2	27,5	26,1	25,5	-	31,4	29,2	27,5	26,1	25,5	24,0
DN250	31,4	29,2	27,5	26,1	25,5	-	23,0	23,0	23,0	19,0	17,0	14,0

*: ASME B16.34 rating depends on the valve body material. Other materials and ratings on demand.

High Pressure Control Valve 8021

with integrated digital positioner, Type 8049

Dimensions and Weights



DN	ØA	C		pressure rating	ØP	number of screws	M	L	stroke	Weight for actuators	
		D1000	D1500							D1000	D1500
25	135	715	-	PN160	100	4	M16	83	6	33 kg	-
	150	715	-	ANSI900	101,6	4	7/8"-9 UNC	102 *		35 kg	-
50	186	720	-	PN160	145	4	M24	92	8	40 kg	-
	215	760	-	ANSI900	165,1	8	7/8"-9 UNC	124 *		53 kg	-
80	230	755	-	PN160	180	8	M24	131	8	60 kg	-
	240	755	-	ANSI900	190,5	8	7/8"-9 UNC	165 *		70 kg	-
100	260	770	865	PN100	210	8	M27	152	8,5	75 kg	82 kg
	275	770	865	ANSI600	215,9	8	7/8"-9 UNC	194 *		95 kg	102 kg
150	375	875	970	PN100	290	12	M30	194	8,5	155 kg	162 kg
	375	875	970	ANSI600	292,1	12	1"-8 UNC	229 *		208 kg	215 kg
200	420	895	990	PN40	320	12	M27	146	8,5	145 kg	152 kg
	420	895	990	ANSI300	330,2	12	7/8"-9 UNC	144,5		150 kg	157 kg
250	450	915	1010	PN40	385	12	M30	156	8,5	160 kg	167 kg
	450	915	1010	ANSI300	387,4	12	1"-8 UNC	156,5		163 kg	170 kg

* face to face dimension acc. ANSI ISA 75.08.09-2015

Dimensions in mm

Text and pictures are not binding. We reserve the right, to alter the equipment.