

Low Temperature Valve 8026-GS3

with integrated positioner

GS 3 series 1/2" up to 4"



Pneumatic low temperature valve with integrated positioner for control of cold fluids down to - 328 °F

- Space saving wafer type construction
- Lowest possible weight
- Quiet operation
- Fast response time
- 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 Kvs (Cv)-values

Technical Information

Design	ANSI flange wafer (self-aligning)	
Nominal Sizes	1/2" - 4"	
Nominal pressure acc. DIN 2401	580 psi (fits also to 145 up to 365 psi)	1/2" - 4"
Nominal pressure acc. ANSI	ANSI 150	1/2" - 4"
	ANSI 300	1/2" - 4"
Fluid Temperature	down to -328°F	
Leakage Rate (% of Cv-value)	Carbon < 0.0001	



Options

- Stainless steel bellow
- Positioner
 - pneumatic
 - electropneumatic
 - electropneumatic (Ex ib IIC T6)
 - digital
- external i/p-converter

Materials

Valve Body	Stainless steel 316 Ti resp. 318
Head Section	Stainless steel 316 Ti
Diaphragm Casing	Aluminium, KTL-coated
Actuator Springs	Stainless steel 301
Packing	Carbon-filled PTFE (spring SST 301)
Valve Stem	Stainless steel 316 Ti, roller burnished
Fixed disc	Stainless steel 316 Ti, Stellite
Sliding disc	Special Carbon material

Positioner

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



Low Temperature Valve 8026-GS3

with integrated positioner



Pilot and operating pressures
(for temperatures to -328°F)

p/p- and i/p-positioner, Type 8047

Actuator Size	20 in ²				40 in ²			
Spring Range (psi)	22 to 44		26 to 55		17 to 32		22 to 39	
Supply Pressure (psi)	58		73		44		58	
	max. pressure psi				max. pressure psi			
DN	Control	On - Off	Control	On - Off	Control	On - Off	Control	On - Off
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	580
1 1/4"	580	580	580	580	580	580	580	580
1 1/2"	421	421	522	580	580	580	580	580
2"	247	276	305	421	421	421	508	580
2 1/2"	203	232	247	348	348	348	421	493
3"	116	145	145	218	203	203	247	319
4"	73	87	87	145	131	131	145	203
Spring Configuration	3 (Standard)		4		3 (Standard)		4	

Standard	Upper limits for pressures in psi			
	PN16	PN40	ANSI 150	ANSI 300
P max.	235	580	235	580

digital positioner, Type 8049

(also on-off valves and valves with other side-mounted positioner)

Actuator Size	20 in ²		40 in ²	
Supply Pressure (psi)	65	80	44	58
DN	max. pressure psi		max. pressure psi	
1/2"	580	580	580	580
3/4"	580	580	580	580
1"	580	580	580	580
1 1/4"	580	580	580	580
1 1/2"	580	580	580	580
2"	580	580	580	580
2 1/2"	535	580	580	580
3"	335	420	580	580
4"	220	230	365	450
Spring Configuration	3 (Standard)		3 (Standard)	

Standard	Upper limits for pressures in psi			
	PN16	PN40	ANSI 150	ANSI 300
P max.	235	580	235	580

Maximum Pressures for GS3-Valves

These pressures must not be exceeded on GS-valves of series GS3, even if the actuator thrust would allow it.

ANSI #150

DN	Sliding unit: Carbon - Stainless steel, coated
	max. pressures in psi for GS3-valves from stainless steel
1/2" - 4"	235

580 psi (PN 40) and ANSI # 300

DN	Sliding unit: Carbon - Stainless steel, coated
	max. pressures in psi for GS3-valves from stainless steel
1/2" - 3"	580
4"	480

SCHUBERT SALZER
INC.

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

Type: 8 0 2 6 /
 Size: 8 0 2 6 /
 Symbol: "V": Valve
 "R": Repair kit (sealings)

6 - 12: Quote only if required.

1. Type		2. Body design		3. Body material		4. Safety position		5. Actuator		6. Special versions		7. Springs		8. Stem Sealing	
K	GS-Low temp. valve with pneumatic actuator	E	GS3-flange less design acc. ANSI150	1	stainless steel 316 Ti / 318	0	spring closes	6	diaphragm actuator 20 in ² (NPT)	M	to state if some sections 7 - 16 are quoted	-	standard	-	PTFE-packing self-adjusting (Standard)
		F	GS3-flange less design acc. ANSI 300			1	spring opens	7	diaphragm actuator 40 in ² (NPT)			4	8 springs		
		G	GS3 - flange less design acc. DIN, 145 - 580 psi					8	diaphragm actuator 80 in ² (NPT)			8	16 springs	1	add. Stainless steel bellow 316 Ti (max. press. 480 psi)

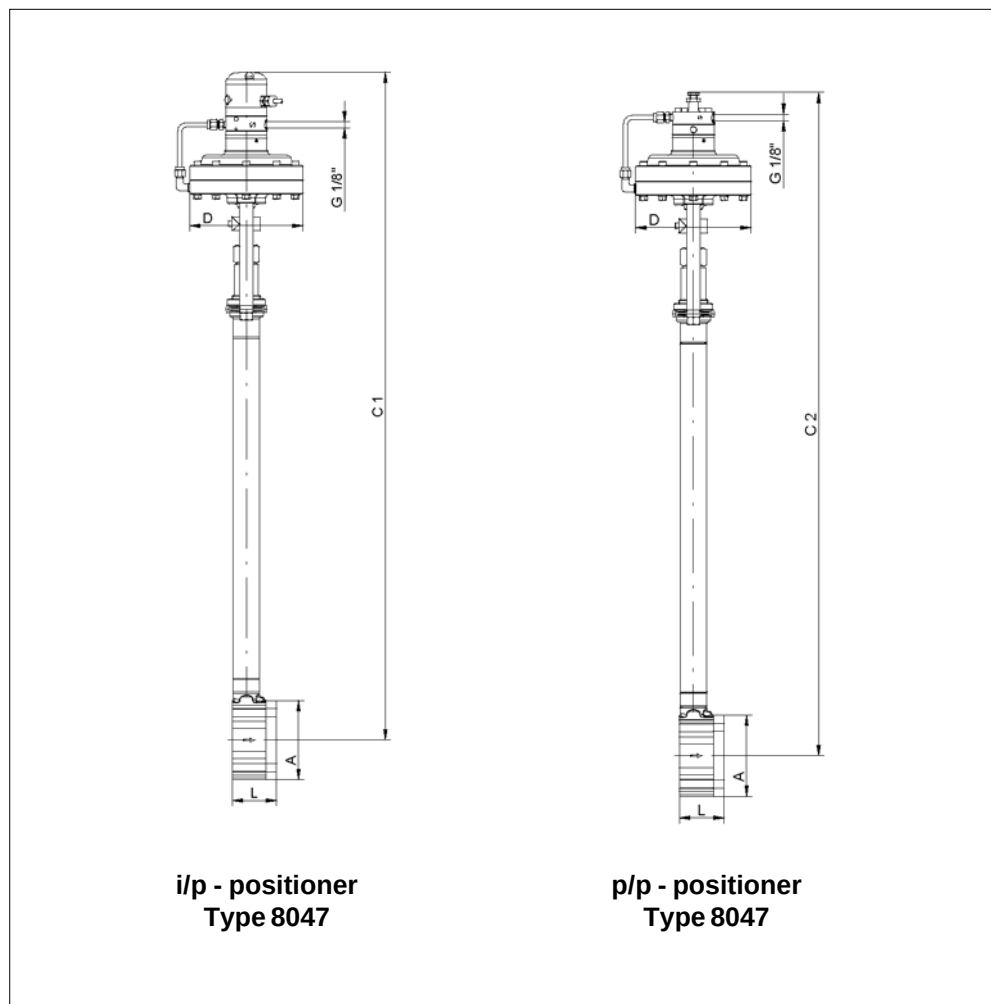
9. Moving disc		10. Fixed disc		11. Cv-Values		12. Characteristic		13. Accessories		14. Positioners		15. Feedback		16. Further special versions	
-	carbon	-	stainless steel/stellite	-	100 % (Stand.) A red. auf 63 % 1 red. auf 40 % B red. auf 25 % 2 red. auf 16 % C red. auf 10 % 3 red. auf 6,3 % 4 red. auf 2,5 % 5 red. auf 1 % 6 red. auf 20 % 7 red. auf 12 % 8 red. auf 2 % 9 red. auf 0,4 %	-	linear 1 equal-%	Z	state, if in following sections accessories are quoted.	-	without 1 p/p positioner Type 8047 3 i/p positioner Type 8047 6 i/p positioner Type 8047 Eex ib IIC T6 w ith plug connc. M12x1 8 i/p positioner Type 8047 w ith plug connc. M12x1 C digital positioner Type 8049, 4-w ire R digital positioner Type 8049, 2-w ire T digital positioner Type 8049, AS-i version W digital positioner Type 8049, 2-w ire ex-version	-	without 0 2 limit switches M12x1 10-30V DC PNP	S	other special versions have to be quoted in letters!

GS-low temperature valve type 8026 with pneumatic actuator, 2", ANSI 150, body material stainless steel, spring closes, standard spring configuration (6 springs), actuator 20 in², PTFE-packing, carbon unit, linear characteristic, digital positioner type 8049, 4-wire

Low Temperature Valve 8026-GS3

with integrated p/p and i/p positioner, Type 8047

Dimensions and Weights



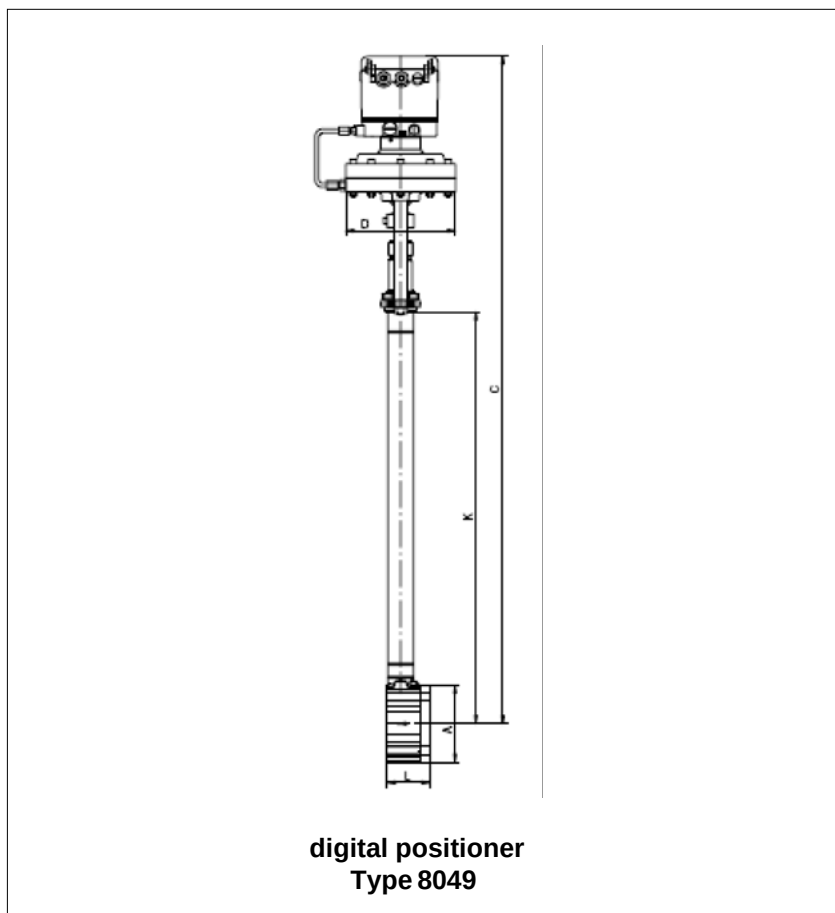
DN	Ø A	C1	C2	Ø D for actuator		PN 40		ANSI 150		ANSI 300		R	L	Stroke	Weight (lbs) for actuator	
				D 125	D 250	P	M	P	M	P	M				D 125	D 250
1/2"	2.5	37.4	36.2	6.5	8.75	2.1	1.75	1.9	1.75	2.1	1.75	0.3	2.2	0.24	25	29
3/4"	2.85	37.6	36.4	6.5	8.75	2.5	1.75	2.3	1.75	2.7	1.75	0.4	2.2	0.24	25	30
1"	3.25	37.8	36.6	6.5	8.75	2.85	1.75	2.65	1.75	2.85	1.75	0.4	2.2	0.24	26	31
1 1/4"	3.5	38	36.8	6.5	8.75	3.25	1.75	3.05	1.75	3.25	1.75	0.4	2.2	0.24	27	32
1 1/2"	3.9	38.4	37.2	6.5	8.75	3.7	1.75	3.45	1.75	3.7	1.75	0.4	2.2	0.24	28	33
2"	4.55	38.8	37.6	6.5	8.75	4.15	1.75	4.15	1.75	4.4	0.9	0.4	2.5	0.31	31	36
2 1/2"	5.45	39.15	38	6.5	8.75	5.1	0.9	4.9	1.75	5.1	0.9	0.4	2.7	0.31	35	40
3"	6	39.55	38.4	6.5	8.75	5.65	0.9	5.45	1.75	5.9	0.9	0.4	2.75	0.31	38	42
4"	7.25	39.95	38.8	6.5	8.75	6.45	0.9	6.95	0.9	7.15	0.9	0.4	2.95	0.33	45	50

Dimensions in inch

Low Temperature Valve 8026-GS3

with integrated positioner, Type 8049

Dimensions and Weights



DN	Ø A	C	K	Ø D for actuator		PN 40		ANSI 150		ANSI 300		R	L	Stroke	Weight (lbs) for actuator	
				D 125	D 250	P	M	P	M	P	M				D 125	D 250
1/2"	2.5	33.65	23.45	6.5	8.75	2.1	1.75	1.9	1.75	2.1	1.75	0.3	2.2	0.24	25	29
3/4"	2.85	33.85	23.6	6.5	8.75	2.5	1.75	2.3	1.75	2.7	1.75	0.4	2.2	0.24	25	30
1"	3.25	34.05	23.8	6.5	8.75	2.85	1.75	2.65	1.75	2.85	1.75	0.4	2.2	0.24	26	31
1 1/4"	3.5	34.25	23.9	6.5	8.75	3.25	1.75	3.05	1.75	3.25	1.75	0.4	2.2	0.24	27	32
1 1/2"	3.9	34.65	24.1	6.5	8.75	3.7	1.75	3.45	1.75	3.7	1.75	0.4	2.2	0.24	28	33
2"	4.55	35.05	24.45	6.5	8.75	4.55	1.75	4.15	1.75	4.4	0.9	0.4	2.5	0.31	31	36
2 1/2"	5.45	35.45	24.8	6.5	8.75	5.1	0.9	4.9	1.75	5.1	0.9	0.4	2.7	0.31	35	40
3"	6	35.85	25.1	6.5	8.75	5.65	0.9	5.45	1.75	5.9	0.9	0.4	2.75	0.31	38	42
4"	7.25	36.2	25.65	6.5	8.75	6.45	0.9	6.95	0.9	7.15	0.9	0.4	2.95	0.33	45	50

Dimensions in inch

Control Valve 8026-GS3

Flow Coefficients - Cv-Values

Ordering code		-	A	1	B	6	2	7	C	3	4	8	5	9
DN	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	-	0.05	-
	eq. perc.	2	-	1.3	-	-	-	-	-	0.12	-	-	-	-
3/4"	(mod.) lin.	7.4	-	-	-	-	1.16	-	-	-	-	0.15	-	-
	eq. perc.	3.5	-	-	-	-	-	-	-	-	-	-	-	-
1"	(mod.) linear	13	7.4	4.6	-	-	1.9	-	1.08	0.72	-	-	-	0.05
	eq. perc.	5.8	-	2.8	-	1.3	-	-	-	-	-	-	-	-
1 1/4"	(mod.) linear	19	12	-	-	-								
	eq. perc.	9.3	-	-	-	-								
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	-	-	-								
2 1/2"	(mod.) linear	60	41	-	-									
	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	-										