

Low Temperature Valve

8026



with integrated positioner

GS 3 series

DN 15 up to DN 100

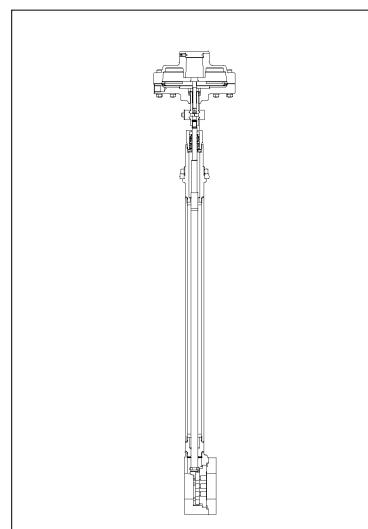
Pneumatic low temperature valve with integrated positioner for control of cold fluids down to -200 °C

- 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	wafer-type design	
Nominal Sizes	DN 15 up to 100 (1/2" - 4")	
Nominal pressure acc. DIN 2401	PN 40 (fits also to PN 10-25)	DN 15 - DN 100
Nominal pressure acc. ANSI	ANSI 150	DN 15 - DN 100
	ANSI 300	DN 15 - DN 100
Fluid Temperature	down to -200°C	
Leakage Rate (% of Kvs-value)	sliding unit carbon-stainless steel, coated < 0,0001	

K_{vs}-values see data sheet 8001.



Materials

Valve Body	stainless steel 1.4571 resp. 1.4581
Head Section	stainless steel 1.4571
Diaphragm Casing	aluminium, KTL-coated
Actuator Springs	stainless steel 1.4310
Packung	carbon-filled PTFE (spring 1.4310)
Valve Stem	stainless steel 1.4571, roller burnished
Valve Plate (fixed)	stainless steel, stellite coated
Valve Disc (moving)	special carbon material

Options

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

**По вопросам продаж и поддержки обращайтесь:
Екатеринбург (343)384-55-89, Казань (843)206-01-48, Краснодар (861)203-40-90,
Москва (495)268-04-70, Санкт-Петербург (812)309-46-40**

Единый адрес: ssr@nt-rt.ru

www.ssalzer.nt-rt.ru

Low Temperature Valve 8026-GS3

with integrated positioner

Admissible Differential Pressures (for temperatures down to -200°C)

p/p- and i/p-positioner

Actuator Size	125 cm ²				250 cm ²			
Spring Range (bar)	1,5 up to 3,0		1,8 up to 3,8		1,2 up to 2,2		1,5 up to 2,7	
Supply Pressure (bar)	4		5		3		4	
max. admissible differential pressure for PN40-body (bar)								
DN	Control	On - Off	Control	On - Off	Control	On - Off	Control	On - Off
15	40	40	40	40	40	40	40	40
20	40	40	40	40	40	40	40	40
25	40	40	40	40	40	40	40	40
32	40	40	40	40	40	40	40	40
40	29	29	36	40	40	40	40	40
50	17	19	21	29	29	29	35	40
65	14	16	17	24	24	24	29	34
80	8	10	10	15	14	14	17	22
100	5	6	6	10	9	9	10	14
Spring Configuration	3 (Standard)		4		3 (Standard)		4	

Standard

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

digital positioner

Actuator Size	125 cm ²		250 cm ²	
Supply Pressure (bar)	4,5	5,5	3,0	4,0
DN	max. admissible differential pressure for PN 40-body (bar)			
15	40	40	40	40
20	40	40	40	40
25	40	40	40	40
32	40	40	40	40
40	40	40	40	40
50	40	40	40	40
65	37	40	40	40
80	23	29	40	40
100	15	16	25	31
Spring Configuration	3 (Standard)	4	3 (Standard)	4

Standard

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

Maximum Pressures for GS3-Valves

These pressures must not be exceeded on GS-valves of series GS 3, even if the actuator thrust would allow it.

ANSI #150

DN	Sliding unit: Carbon - Stainless steel, coated
	max. admissible pressures in bar for GS3-valves from stainless steel
15 - 100	16



PN 40 and ANSI # 300

DN	Sliding unit: Carbon - Stainless steel, coated
	max. admissible pressures in bar for GS3-valves from stainless steel
15 - 80	40
100	33

Low Temperature Valve 8026-GS3

with integrated positioner

Positioner

	Digital positioner Type 8048	i/p-positioner Type 8047	p/p-positioner Type 8047
Input signal range	0/4 - 20 mA, 0/2 - 10 V	0/4 - 20 mA, 0/2 - 10 V	0,2 - 1 bar
Supply voltage, electrical	24 V DC, maximum 10 W	none	none
Supply air pressure	max. 6 bar	max. 6 bar	max. 6 bar
Hysteresis	< 0,5 %	< 1 %	< 1 %
Rangeability	40 : 1	30 : 1	30 : 1
Characteristics	linear, equal percentage, user-defined, process optimized*	Characteristics of function unit	Characteristics of function unit
Adjustment (Stroke, zero point)	self-adapting	mechanical	mechanical
Ambient temperature	-20°C up to + 75°C	-20°C up to +6 0°C	-20°C up to +80°C
Protection class acc. DIN 40050	IP65	IP 54	IP 54
Ex-proof (Optional)	-	 II 2 G EEx ib IIC T6 up to 45°C  II 2 G EEx ib IIC T5 up to 60°C	-

*Produces a linear process flow characteristic for optimal control. After entering a few process data points (e.g. upstream and downstream pressures) the optimised flow characteristic is calculated by the positioner configuration software and stored in the positioner memory.

Digital Positioner Type 8049

Version	4-wire	2-wire	AS-I
Set point signal	0/4 - 20 mA	4 - 20 mA	Single Slave, Slave Profil S - 7.3.4
Burden voltage	1,2 V	14 V	-
Supply energy, electrical	24 VDC	none	supply with AS-I
Adaption to range and zero	self-learning		
Configuration	with PC-Software		
Air delivery*	50 NI/min.	according the version	50 NI/min.
System air consumption	none		
Ambient temperature limits	-20 up to +75°C	-10 up to +75°C	-20 up to +75°C
Supply connection	G 1/8"		
Class of protection acc. DIN 40050	IP 65		
Accessories	Analogue feedback module RM-1 2 wire design, feedback signal 4 - 20 mA		

* 6 bar supply air

Low Temperature Valve 8026-GS3

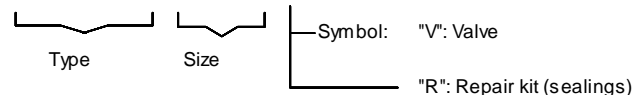
with integrated positioner



Ordering Number System

8	0	2	6	/			V	K								M						Z		S

1 - 5 : Please quote all 5 sections.
6 - 12: Quote only if required.



1. Type	2. Connection	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-flangeless design acc. ANSI 150	1 stainless steel 1.4571 / 1.4581	0 spring closes	3 diaphragm actuator 125 cm²	M To state if some sections 7-16 are quoted	- Standard	- PTFE-packing self-adjusting (Standard)
	F GS3-flangeless design acc. ANSI 300		1 spring opens	4 diaphragm actuator 250 cm²	A Nut and nut acc. DIN2512	4 8 springs	
	G GS3-flangeless design acc., DIN PN10-PN40			5 diaphragm actuator 500 cm²	C Nut and tongue acc. DIN 2512	8 16 springs	1 add. stainless steel bellow 1.4571 (max. press. 33 bar)
				6 125 cm² NPT	E 2x low ered face acc. DIN 2513		
			7 250 cm² NPT	H Low ered and raised face acc. DIN 2513			

9. Moving disc	10. Fixed disc	11. Kvs-values	12. Characteristic	13. Accessories	14. Positioners	15. Feedback	16. Further versions
- carbon	- stainless steel 1.4571	- 100 %(Stand.)	- linear	Z State, if in following sections accessories are quoted.	- without	- without	S Other special versions have to be quoted in letters
B carbon, fibre reinforced	coated	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 %	1 equal-%		1 p/p positioner Type 8047 3 i/p positioner Type 8047 6 i/p positioner ex Type 8047 (Eex ib IIC T6) with plug connection M12x1 8 i/p positioner Type 8047 with plug connection M12x1 A process controller Type 8048 IPC C digital positioner, Type 8049, 4 wire D digital positioner, Type 8048, IP65 R digital positioner, type 8049, 2 wire T digital positioner, Type 8049, AS-i version	0 2 limit switches M12x1 10-30V DC PNP	

Ordering example: 8026/050VKG103M-----ZD
GS-low temperature valve type 8026 with pneumatic actuator, DN 50, PN 10 - PN 40, body material stainless steel, spring closes, standard spring configuration (6 springs), actuator 125 cm², PTFE-packing, carbon unit, linear characteristic, digital positioner

Low Temperature Valve 8026-GS3

with integrated positioner



Dimensions and Weights

DN	Ø A	C1	C2	C3	Ø D for actuator		PN 40		ANSI 150		ANSI 300		R	L	Stroke	Weight (kg) for actuator	
					D 125	D250	P	M	P	M	P	M				D 125	D 250
15	64	950	920	980	165	222	53	45	48,8	45	53	45	8	56	6	11,2	13,4
20	72	955	925	985	165	222	63	45	58,2	45	68	45	10	56	6	11,4	13,6
25	82	960	930	990	165	222	73	45	67,6	45	73	45	10	56	6	11,8	14,0
32	89	965	935	995	165	222	83	45	77	45	83	45	10	56	6	12,2	14,4
40	99	975	945	1005	165	222	94	45	87	45	94	45	10	56	6	12,6	14,8
50	116	985	955	1015	165	222	106	45	106	45	112	22,5	10	64	8	14,2	16,4
65	138	995	965	1025	165	222	129	22,5	125	45	129	22,5	10	68	8	16,0	18,2
80	153	1005	975	1035	165	222	144	22,5	138	45	150	22,5	10	70	8	17,1	19,3
100	184	1015	985	1045	165	222	164	22,5	176	22,5	182	22,5	10	75	8,5	20,6	22,8

Dimensions in mm

По вопросам продаж и поддержки обращайтесь:
 Екатеринбург (343)384-55-89, Казань (843)206-01-48, Краснодар (861)203-40-90,
 Москва (495)268-04-70, Санкт-Петербург (812)309-46-40
 Единый адрес: ssr@nt-rt.ru
www.ssalzer.nt-rt.ru