

Low Temperature Valve

8026



with integrated positioner

GS 3 series

DN 15 up to DN 100

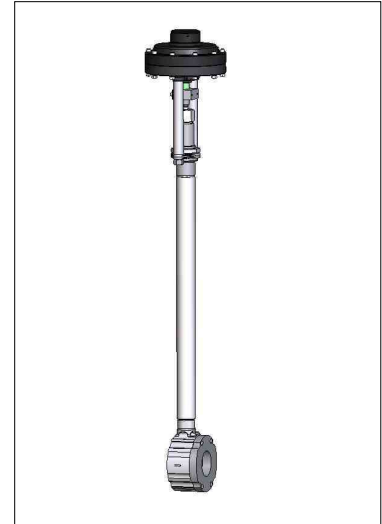
Pneumatic low temperature valve with integrated positioner for control of cold fluids down to -200 °C

- 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 for flanges acc. DIN EN 1092-1, form B	
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.



Options

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

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

Positioner

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

Low Temperature Valve 8026-GS3

with integrated positioner

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

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

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

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

digital positioner, Type 8049

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

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

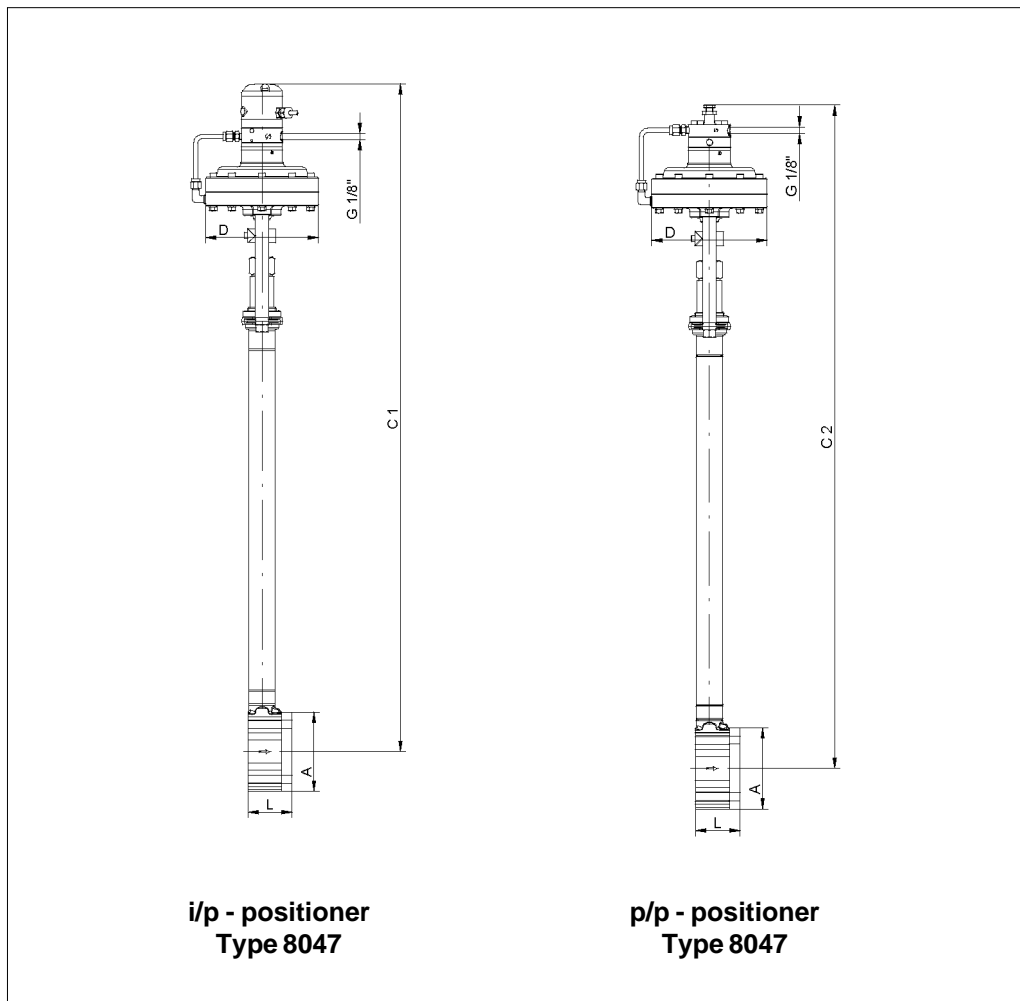
PN 40 and ANSI # 300

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

Dimensions and Weights



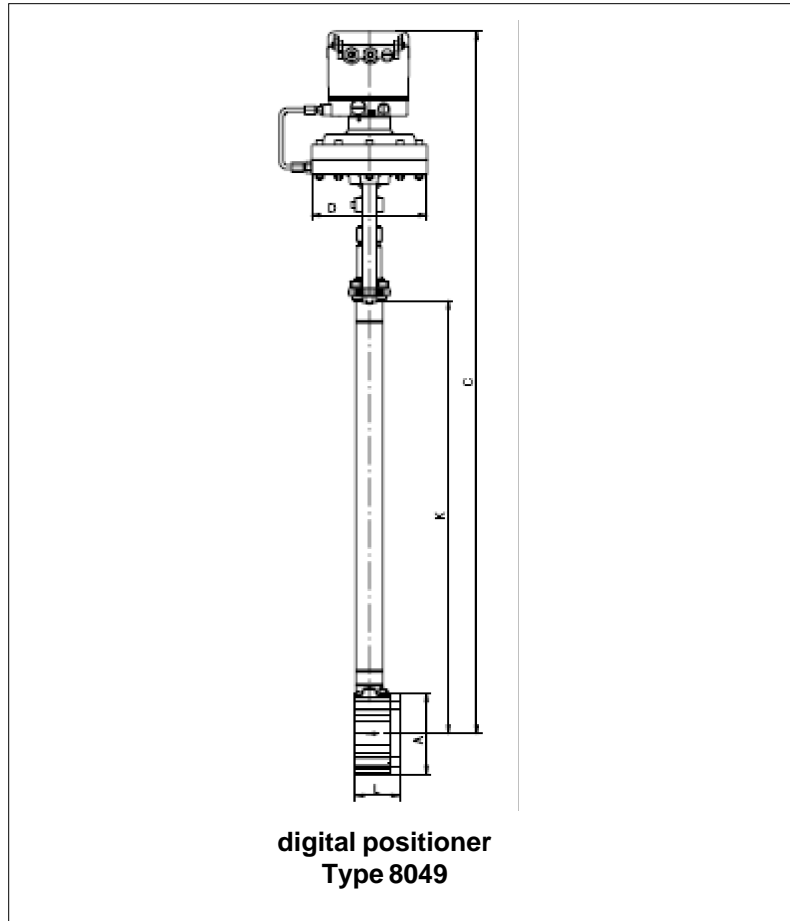
DN	Ø A	C1	C2	Ø D for actuator		PN 40		ANSI 150		ANSI 300		R	L	Stroke	Weight (kg) for actuator	
				D 125	D250	P	M	P	M	P	M				D 125	D 250
15	64	950	920	165	222	53	45	48,8	45	53	45	8	56	6	11,2	13,4
20	72	955	925	165	222	63	45	58,2	45	68	45	10	56	6	11,4	13,6
25	82	960	930	165	222	73	45	67,6	45	73	45	10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

Dimensions in mm

Low Temperature Valve 8026-GS3

with integrated digital 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 (kg) for actuator	
				D 125	D250	P	M	P	M	P	M				D 125	D 250
15	64	855	595	165	222	53	45	48,8	45	53	45	8	56	6	11,2	13,4
20	72	860	599,5	165	222	63	45	58,2	45	68	45	10	56	6	11,4	13,6
25	82	865	604	165	222	73	45	67,6	45	73	45	10	56	6	11,8	14,0
32	89	870	606,5	165	222	83	45	77	45	83	45	10	56	6	12,2	14,4
40	99	880	612	165	222	94	45	87	45	94	45	10	56	6	12,6	14,8
50	116	890	620,5	165	222	115	45	106	45	112	22,5	10	64	8	14,2	16,4
65	138	900	629,5	165	222	129	22,5	125	45	129	22,5	10	68	8	16,0	18,2
80	153	910	638	165	222	144	22,5	138	45	150	22,5	10	70	8	17,1	19,3
100	184	920	651,3	165	222	164	22,5	176	22,5	182	22,5	10	75	8,50	20,6	22,8

Dimensions in mm