

# 3/2 - Way Control Valve 7082

with integrated positioner

DN 15 up to DN 50 - PN 40



**Pneumatically operated 3/2-way control valve in stainless steel with integrated positioner for the control of neutral and aggressive media.**

- Compact design
- All parts in contact with medium made from stainless steel
- For temperatures from -50°C up to +200°C
- Working pressure up to 16 bar
- No moving parts accessible from the exterior
- Non-contact stroke feedback (inductive sensor)
- Operation independent of position and control pressure
- Insensitive to vibration
- Instrument quality air not required for the feed air
- Flexible selection of characteristics using software



## Technical Information

Body material	Stainless steel 1.4408
Nominal sizes	DN 15 up to DN 50
Connections	Pipe thread acc. ISO 228-1: G 1/2" - 2" NPT thread: 1/2" - 2"
Nominal pressure	PN40
Fluid temperature*	-30°C up to + 200°C, opt. -50°C up to +220°C
with metal bonnet	-30°C up to +170°C, opt.-50°C up to + 200°C
with plastic bonnet	-30°C up to +135°C
with diaphragm actuator	-30°C up to +200°C
Ambient temperature	digital positioner -10°C up to +75°C analog positioner -15°C up to +60°C

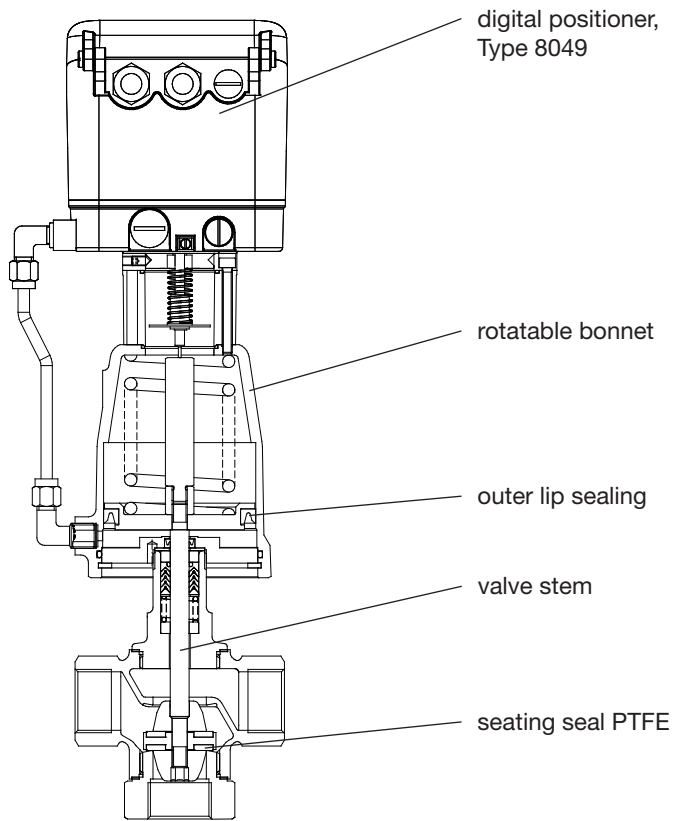
\*: Please consider further temperature versions and limits in technical bulletin 32

## Materials

Body	Stainless steel 1.4408/1.4571
Seating seal	PTFE
Bonnet	Brass chrome plated (actuator Ø 80 mm) Aluminium (actuator Ø 125 mm)
Diaphragm actuator	stainless steel 1.4301
Actuator springs	Stainless steel 1.4310 (actuator Ø 80 mm, 250 mm) Spring steel wire C, zinc coated (actuator Ø 125 mm)
Packing	PTFE (carbon filled), spring 1.4310
Valve stem	Stainless steel 1.4571, roller burnished
Position indicator	PA Trogamid (clear)

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in stainless steel 7082



Kvs-Values

DN	Kvs - value			
	diverting function		mixing function	
	P-A	P-B	P1-A	P2-A
15	7,5	5,5	5,5	7,5
20	10	6,5	6,5	10
25	14	10	10	14
32	18	15	15	18
40	45	27	27	45
50	57	41	41	57

## Positioner

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

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Valid max. pressure

## Diverting function

digital positioner Type 8049

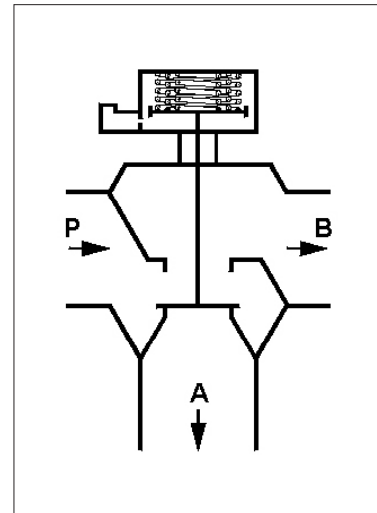
DN	Differential pressure	Supply pressure	Piston Ø	Springs
	bar	bar		Number
15/20	8	4,5 - 6,0	80	2
25	8	3,5 - 4,5	125	3
32	8	4,0 - 5,0	125	3
40	4	3,0 - 4,0	250	4
40	6	3,0 - 4,5	250	6
50	3	3,0 - 4,5	250	6

### Attention:

The maximum pilot pressure must not be exceeded since otherwise the piston rod would be damaged.

### Recommendation:

In order to avoid a damage on the valve because of a to high supply air pressure, we recommend the use of a supply air pressure regulator.



diverting function

## Mixing function

digital positioner Type 8049

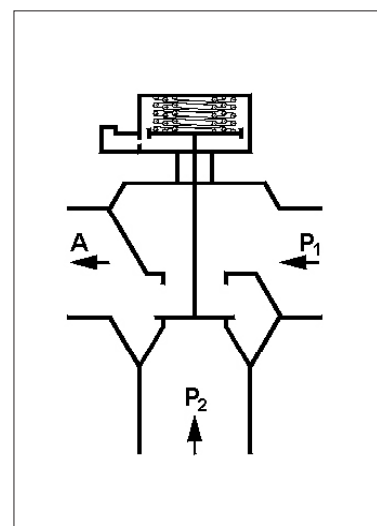
DN	Differential pressure	Supply pressure range	Piston Ø	Springs
	bar	bar		Number
15/20	15	5 - 6	80	1
15/20	16	3 - 3,6	125	2
25	8,5	5 - 6	80	1
25	16	3 - 3,6	125	2
32	5	5 - 6	80	1
32	11	3,5 - 3,8	125	2
40	11	4,5 - 6	125	3
40	13	3 - 4,5	250	6
50	6	5 - 6	125	3
50	9	4 - 4,8	250	8

### Attention:

The maximum pilot pressure must not be exceeded since otherwise the piston rod would be damaged.

### Recommendation:

In order to avoid a damage on the valve because of a to high supply air pressure, we recommend the use of a supply air pressure regulator.



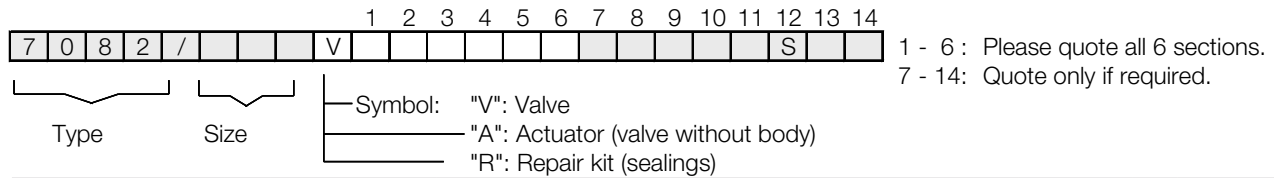
mixing function

# 3/2-Way Control Valve



in stainless steel 7082

## Ordering Number System



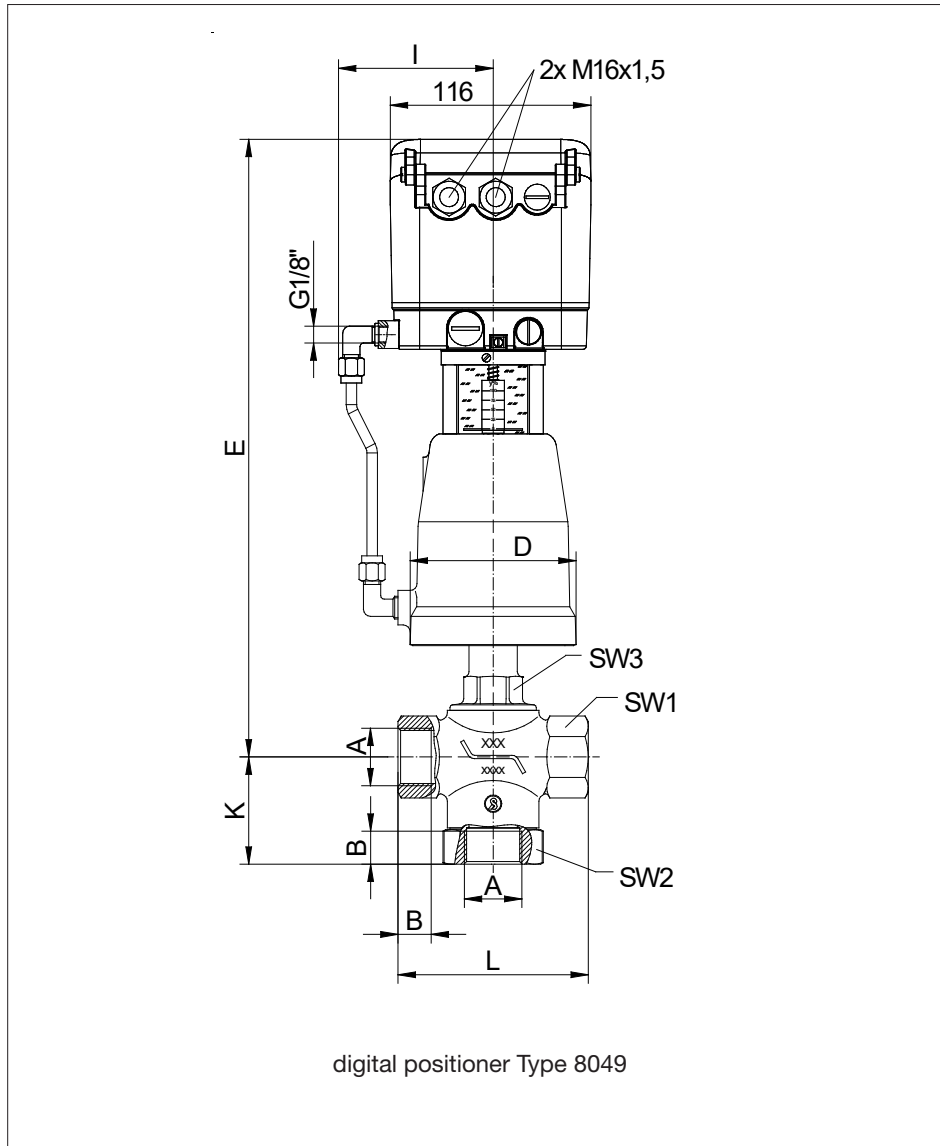
1.	Body type	2.	Connection	3.	Body materials	4.	Seat material	5.	Pilot function	6.	Actuator	7.	Springs
3	3/2-way control valve diverting function	0	pipe thread ISO 228-1	2	stainless steel 1.4408	0	PTFE	C	digital positioner, Type 8049 4 wire	1	piston 80 mm	-	standard
4	3/2-way control valve mixing function	5	NPT thread					R	digital positioner Type 8049 2 wire	2	piston 125 mm	R	4 springs (D 250mm)
								W	digital positioner Type 8049- ExPro, ATEX, IECEX	C	diaphragm D 250mm	T	6 springs (D 250mm)
								K	digital positioner Type 8049 ExPro-FM			W	8 springs (D 250mm)
								N	digital positioner Type 8049 IO-Link version				
								K	„digital positioner type 8049 ExPro-FM with base plate in stainless steel; Ta = -10°C to +75°C; IS Class I Division 1, Groups A, B, C, D; T4 Entity; Class I Zone 0 AEx ia IIC T4 Entity, IP65“				
								Y	„digital positioner type 8049 ExPro-FM with base plate in stainless steel; Ta = -10°C to +75°C; NI Class I Division 2, Groups A, B, C, D; T4 NIFW, IP65“				
8.	Characteristic	9.	Packing	10.	Kvs-value	11.	Accessories	12.	Special versions	13.	Seal	14.	Position indicator
-	linear	-	standard	-	full Kvs-value	-	without	S	To state if some stations are quoted!	-	standard	5	metal tie-on label with type label and protection film
		2	packing underneath			6	pilot-valve DN2 230V AC						
						7	pilot-valve DN2 24V DC						

Ordering Example: 7082/020V4520C1  
 3/2-way control valve in stainless steel, DN 20, NPT-thread, seat material PTFE, digital positioner Type 8049, 4 wire, actuator Ø 80 mm, linear flow characteristic, Kvs 100 %

# 3/2-Way Control Valve

in stainless steel 7082

## Weights and Dimensions



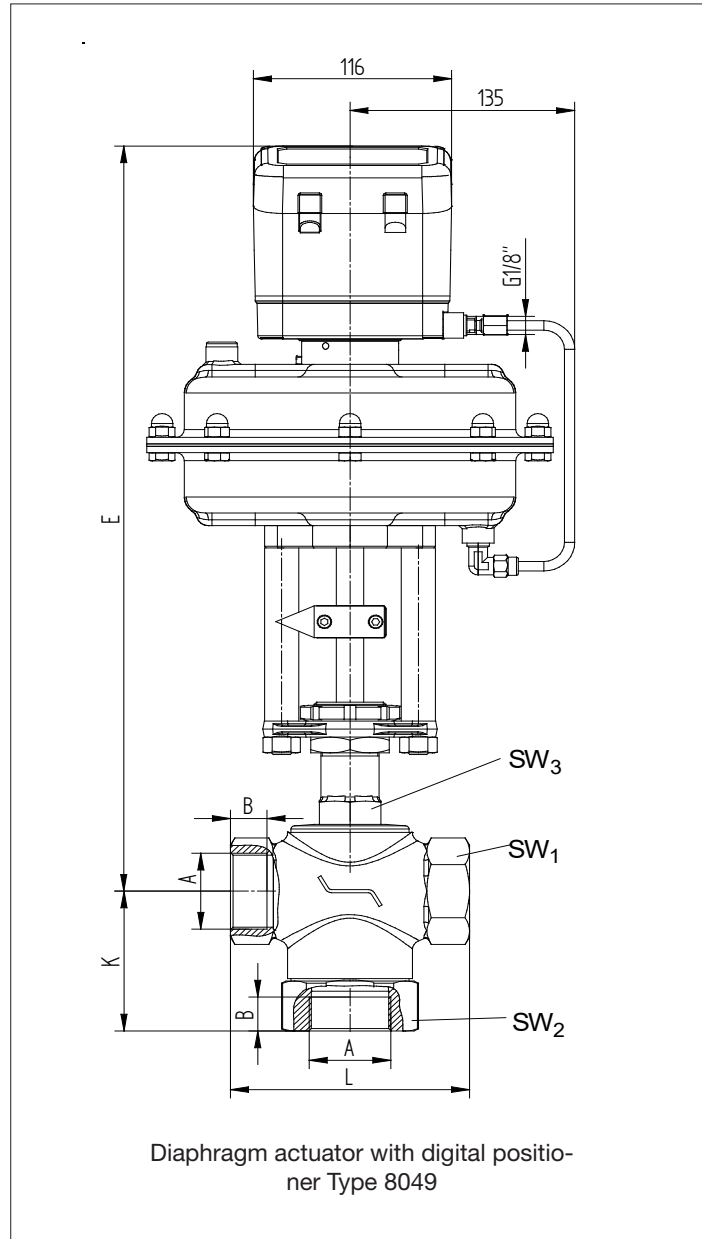
DN	Actuator	A G/NPT	B G- thread	B NPT- thread	D	K	L	I	E	Stroke	SW1	SW2	SW3	Weight (kg) Type 8049
15	80	1/2"	15	14,5	96	62	90	90	346	14	26	41	30	4,7
15	125	1/2"	15	14,5	146	62	90	105	366	14	26	41	30	6,6
20	80	3/4"	16,3	15	96	62	90	90	346	14	32	41	30	4,7
20	125	3/4"	16,3	15	146	62	90	105	366	14	32	41	30	6,6
25	80	1"	19,1	18	96	63	110	90	358	14	41	55	30	5,1
25	125	1"	19,1	18	146	63	110	105	378	14	41	55	30	7,0
32	80	1 1/4"	21,4	18,4	96	74	130	90	362	15	48	65	30	5,7
32	125	1 1/4"	21,4	18,4	146	74	130	105	382	15	48	65	30	8
40	125	1 1/2"	21,4	18,4	146	88	140	105	397	23	58	75	32	8,5
50	125	2"	25,7	19	146	95	180	105	410	23	85	90	36	11,7

Dimensions in mm

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## Weights and Dimensions



DN	Actuator	A G/NPT	B G	B NPT	D	K	L	E	Stroke	SW1	SW2	SW3	Weight (kg)
40	250	1 1/2"	21,4	18,4	240	88	140	470	23	58	75	32	14
50	250	2"	26	19	240	95	180	480	23	85	90	36	17

Dimensions in mm