

Right Angle Control Valve 7051

DN 15 up to DN 50 - PN 40

Pneumatically operated valve for control loops with neutral up to highly aggressive media

- Integrated positioner
- Compact design
- All parts in contact with medium made from stainless steel
- For temperatures from -100°C up to +220°C
- Operating pressures up to 40 bar

Technical Information

Nominal sizes	DN 15 up to DN 50
Body material	1.4408
Connection	
Pipe thread acc. ISO 228-1	1/2" - 2"
Nominal pressure	PN 40
Media temperature*	-30°C bis +200°C opt. -100°C bis +220°C
Ambient temperature**	digital positioner -10°C up to +75°C analog positioner -15°C up to +60°C
Vacuum	> 0,001 bar abs
Working pressure for version without cavities	maximum 12 bar

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



Options

- Optical position indicator
- External i/p-converter 8045
- Ex-i/p-positioner (II 2G EEx ib IIC T6/T5)
- Inductive limit switches

Positioners:

- p/p-positioner Type 8047
- i/p-positioner Type 8047
- digital positioner Type 8049

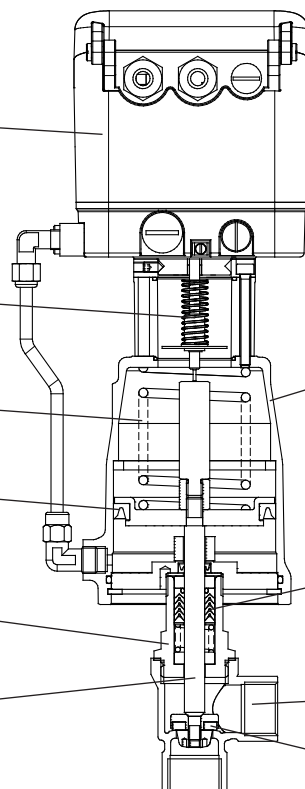
position indicator
PA Trogamid (clear)

actuator springs

outer lip sealing

head section

piston rod
stainless steel 1.4571,
roller burnished



bonnet chrome plated brass (actuators Ø 80 mm)
aluminium, corrosion protected (actuator Ø 125 mm),
option: reinforced plastic material (actuators Ø 80 mm only)
bonnets in stainless steel available if desired

packing from filled PTFE (carbon filled), special version for reduced hollow spaces (packing underneath)

stainless steel body 1.4408

seating seal PTFE and other materials

Right Angle Control Valve 7051



with integrated positioner

Kvs- Values

DN	Linear						Equal Percentage					
	15	20	25	32	40	50	15	20	25	32	40	50
100 %	5,2	10,5	16,5	25	40	57	4,1	9,3	12	16	32	-
40 %	2,1	4,2	6,6	10	16	-	1,7	3,7	4,8	6,4	12,8	-
25 %	1,3	2,65	4,1	-	-	-	1	2,3	3	-	-	-

Admissible Differential Pressures

digital positioner

DN	Differential pressure	Supply pressure range	Piston Ø	Springs
	bar	bar	mm	Number
15	17	4 - 6	80	2
20	17	4 - 6	80	2
25	17	4 - 6	80	1
32	10	4 - 6	80	1
32	17	3 - 6	125	2
40	6	4 - 6	80	1
40	17	4 - 6	125	3

p/p-positioner i/p-positioner

DN	Differential pressure	Supply pressure range	Piston Ø	Springs
	bar	bar	mm	number
15	17	4 - 6	80	2
20	17	4 - 6	80	2
25	12	4 - 6	80	1
32	7	4 - 6	80	1
32	13	3 - 6	125	2
40	4	4 - 6	80	1
40	11	4 - 6	125	3

diaphragm actuator, direct pressure

DN	Differential pressure (bar)		Supply air (bar)		Diaphragm area mm
	spring range		spring range		
	0,2 - 1 bar	0,4 - 2 bar	0,2 - 1 bar	0,4 - 2 bar	
15	16	16	1,2	2,4	250
20	15	16	1,2	2,4	250
25	8	16	1,2	2,4	250
32	5	15	1,2	2,4	250
40	3	10	1,2	2,4	250
50	2	6	1,2	2,4	250

Positioner

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

Right Angle Control Valve 7051, reinforced design

with integrated positioner
DN50 PN40

Admissible Differential Pressures

digital positioner

DN	Differential pressure (bar)		Supply pressure range	Piston Ø	Springs
	PTFE	PEEK	bar	mm	number
50	3	-	4 - 6	80	1
50	9	3	4 - 6	125	3
50	12	5	3 - 6	250	6
50	16	10	4 - 6	250	8
50	16	16	4 - 6	250	12

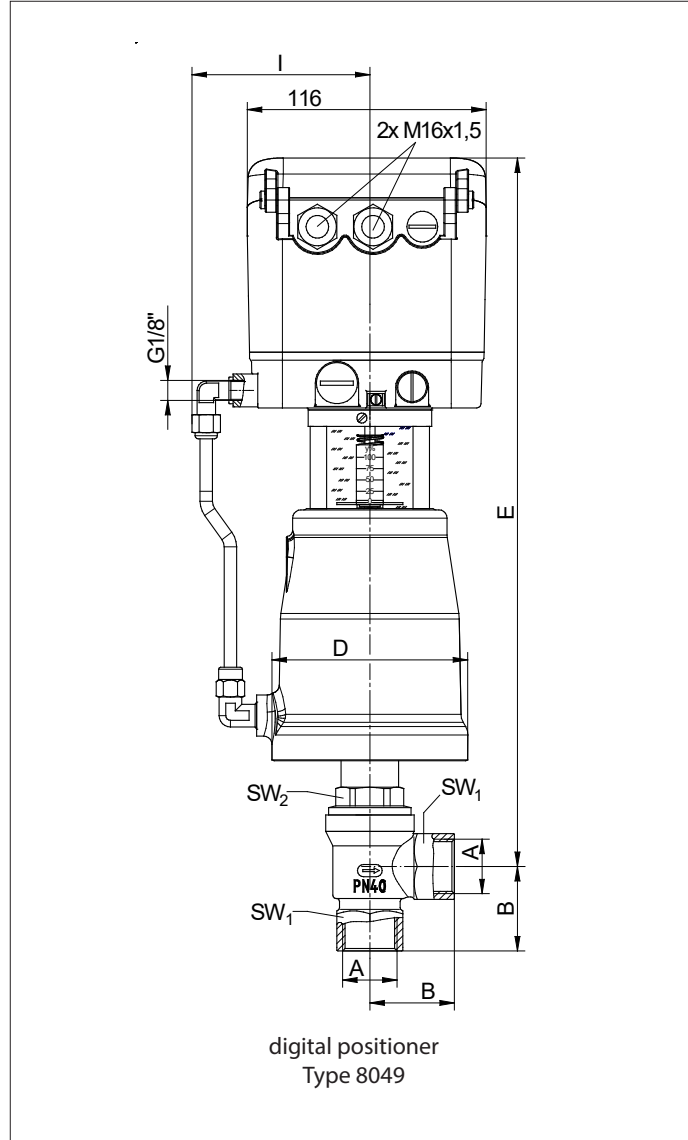
p/p-positioner i/p-positioner

DN	Differential pressure (bar)	Supply pressure range	Piston Ø	Springs
	PTFE	bar	mm	number
50	2	4 - 6	80	1
50	6	4 - 6	125	3
50	12	4 - 6	250	10
50	16	4 - 6	250	12

Right Angle Control Valve 7051

piston actuator with integrated positioner

Weights and Dimensions



DN	Actuator	A	B	D	E	Stroke red.	I	SW1	SW2	Kvs-value	Weight
15	80	1/2"	41	96	343	9	90	25	30	5,2	4,4
20	80	3/4"	41	96	344	13	90	32	30	10,5	4,5
25	80	1"	41	96	357	14,5	90	41	60	16,5	4,7
32	80	1 1/4"	65	96	357	18	90	50	30	2,5	5,0
32	125	1 1/4"	65	146	378	18	105	50	30	2,5	7,6
40	80	1 1/2"	65	96	361	24	90	55	32	40	5,3
40	125	1 1/2"	65	146	382	24	105	55	32	40	7,9

reinforced design:

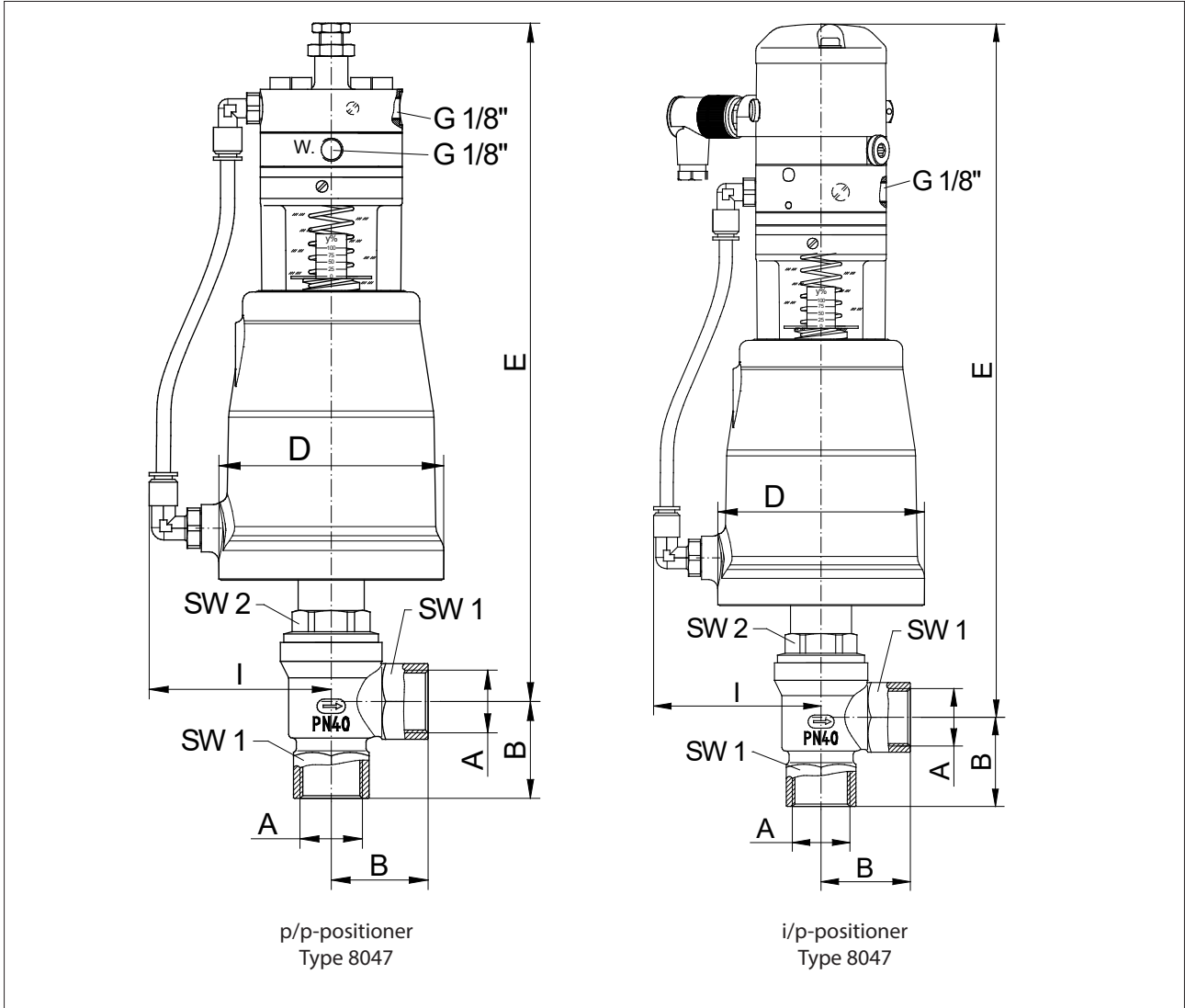
50	80	2"	65	96	378	24	90	68	36	57	5,9
50	125	2"	65	146	399	24	105	68	36	57	8,5

Dimensions in mm

Right Angle Control Valve 7051

piston actuator with integrated positioner

Weights and Dimensions



DN	Actuator	A	B	D	I	E		Weight (kg)		Stroke
						p/p	i/p	p/p	i/p	
15	80	1/2"	41	96	80	281	318	3,7	4,0	10
20	80	3/4"	41	96	80	282	319	3,8	4,1	13
25	80	1"	41	96	80	295	332	4,0	4,3	15
32	80	1 1/4"	65	96	80	295	332	4,3	4,6	18
32	125	1 1/4"	65	146	105	315	352	6,9	7,2	18
40	80	1 1/2"	65	96	80	299	336	4,6	4,9	24
40	125	1 1/2"	65	146	105	319	356	7,2	7,5	24

reinforced design:

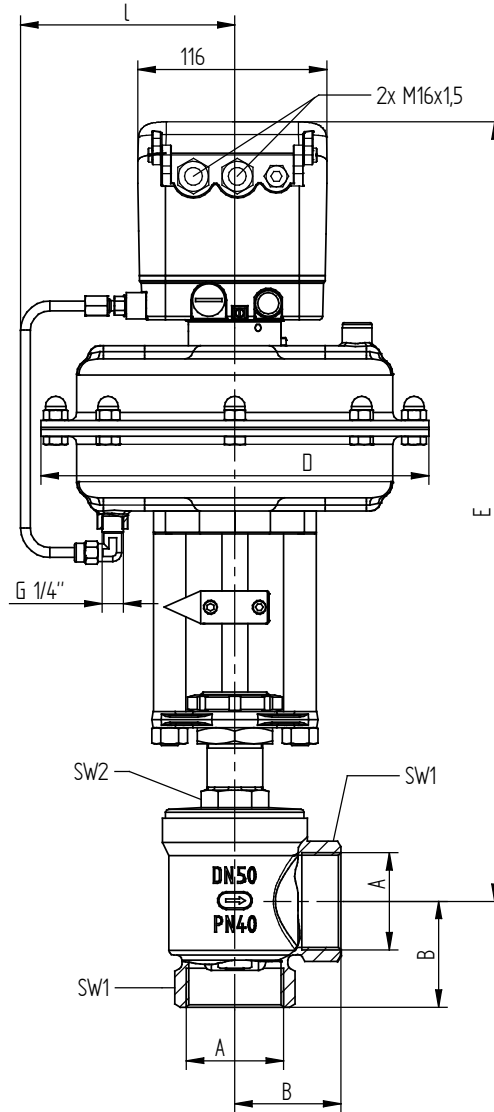
50	80	2"	65	96	80	316	353	5,2	5,5	24
50	125	2"	65	146	105	336	373	7,8	8,1	24

Dimensions in mm

Right Angle Control Valve 7051

diaphragm actuator with integrated positioner

Weights and Dimensions



diaphragm actuator
with digital positioner Type 8049

DN	Actuator	A	B	D	E	Stroke red.	I	SW1	SW2	Kvs-value	Weight kg
15	250	1/2"	41	238	420	10	135	25	30	5	12,8
20	250	3/4"	41	238	420	13	135	32	30	11	12,9
25	250	1"	41	238	435	15	135	41	30	17	13,1
32	250	1 1/4"	65	238	455	18	135	50	30	25	16,1
40	250	1 1/2"	65	238	460	24	135	55	32	40	16,4
50	250	2"	65	238	480	24	135	68	36	57	17

Dimensions in mm