

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 up to +200°C
- Operating pressures up to 40 bar

Technical Information

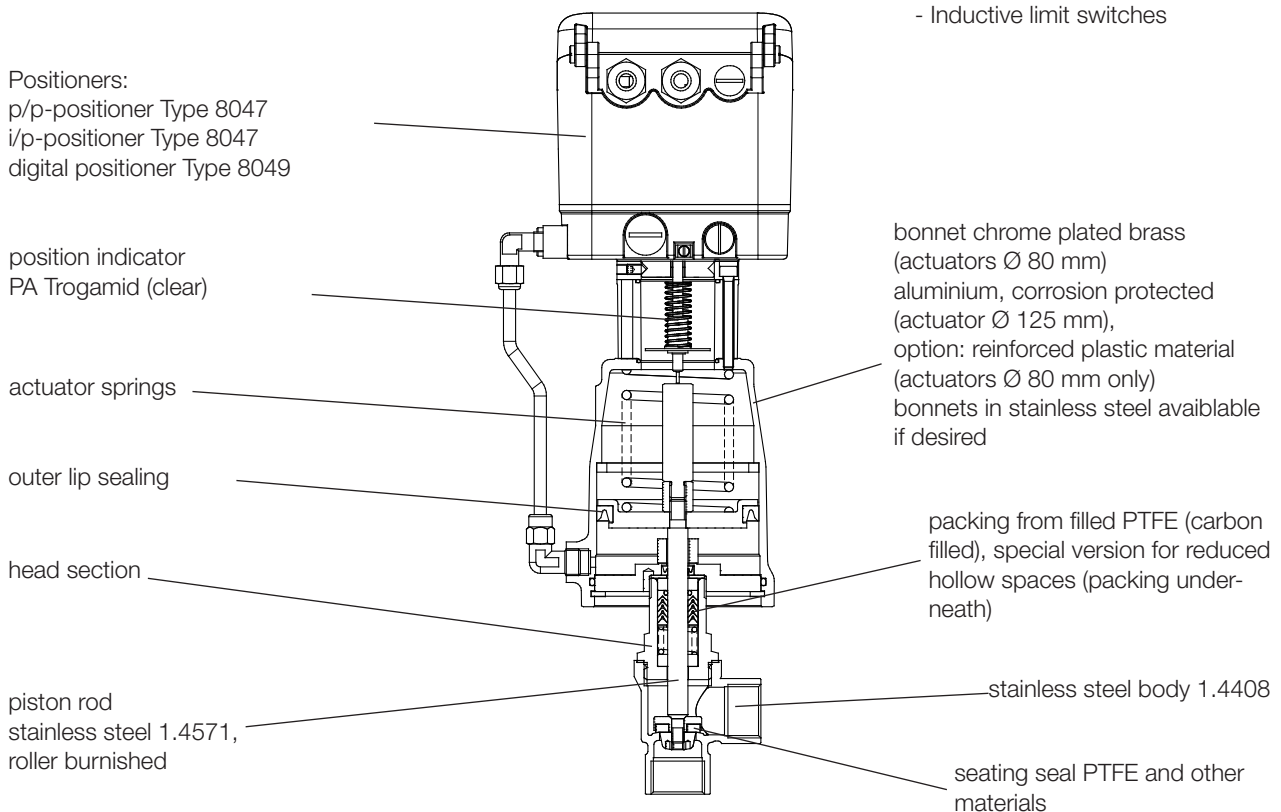
Nominal sizes	DN 15 up to DN 50
Body material	1.4408
Connection	
Pipe thread acc. ISO 228-1	1/2" - 2"
Nominal pressure	PN 40
Media temperature*	-30°C up to +200°C
Ambient temperature*	-30°C up to +60°C
Viscosity of media	maximal 600 mm ² /s (600cSt, 80°E)
Vacuum	> 0,001 bar abs
Working pressure for version 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



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	16	4 - 6	80	2
20	16	4 - 6	80	2
25	16	4 - 6	80	1
32	10	4 - 6	80	1
32	16	3 - 6	125	2
40	6	4 - 6	80	1
40	16	4 - 6	125	3

p/p-positioner i/p-positioner

DN	Differential pressure	Supply pressure range	Piston Ø	Springs
	bar	bar	mm	number
15	16	4 - 6	80	2
20	16	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

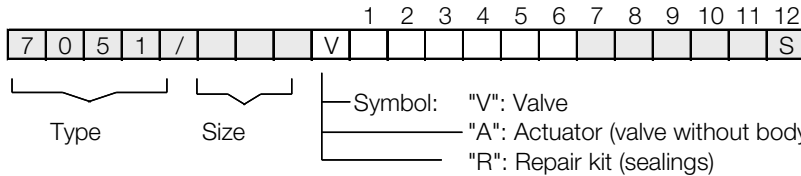
DN	Differential pressure (bar)	Supply pressure range	Piston Ø	Springs
	PTFE	bar	mm	number
50	2	4 - 6	80	1
50	6	4 - 6	125	3
50	12	4 - 6	250	10
50	16	4 - 6	250	12

Right Angle Control Valve 7051

with integrated positioner



Ordering Number System



1 - 6 : Please quote all 6 sections.
 7 - 12: Quote only if required.

1. Body type	2. Connection	3. Body material	4. Seat material	5. Pilot function	6. Actuator
7 right angle control valve Type 7051	0 pipe thread acc. ISO 228-1 5 NPT thread	2 stainless steel 1.4408	0 PTFE (Teflon)	6 p/p positioner + position indicator Type 8047 7 i/p positioner + position indicator Type 8047 8 i/p positioner + plug connec. M12x1 + position indicator Type 8047 9 as above, but for hazard. location use (II 2 G EEx ib IIC T6) plug connec. M12x1 Type 8047 C dig. positioner, type 8049 4 wire R dig. positioner, type 8049 2 wire T dig. positioner, type 8049 AS-i version W dig. positioner, type 8049 2 wire, ex-version	1 piston 80 mm 2 piston 125 mm diaphragm, stainless steel D 250mm C

7. Springs	8. Characteristic	9. Packing	10. Kvs-Values	11. Accessories	12. Special versions
- standard spring configuration 1 NO (only with digital positioner) P spring set 0,2-1bar T 6 springs Y 12 springs	- linear 1 equal percentage	- standard 2 packing underneath	- 100 % 1 red. 40% 2 red. 25%	6 without pilot-valve DN2 230V AC 7 pilot-valve DN2 24V DC	S to state if further sections are quoted

Ordering Example: 7051/020V7020C1
 Right angle control valve 7051, DN 20, pipe thread, body material stainless steel, seating seal PTFE, digital positioner 4 wire, actuator 80 mm, linear flow characteristic, Kvs 100 %

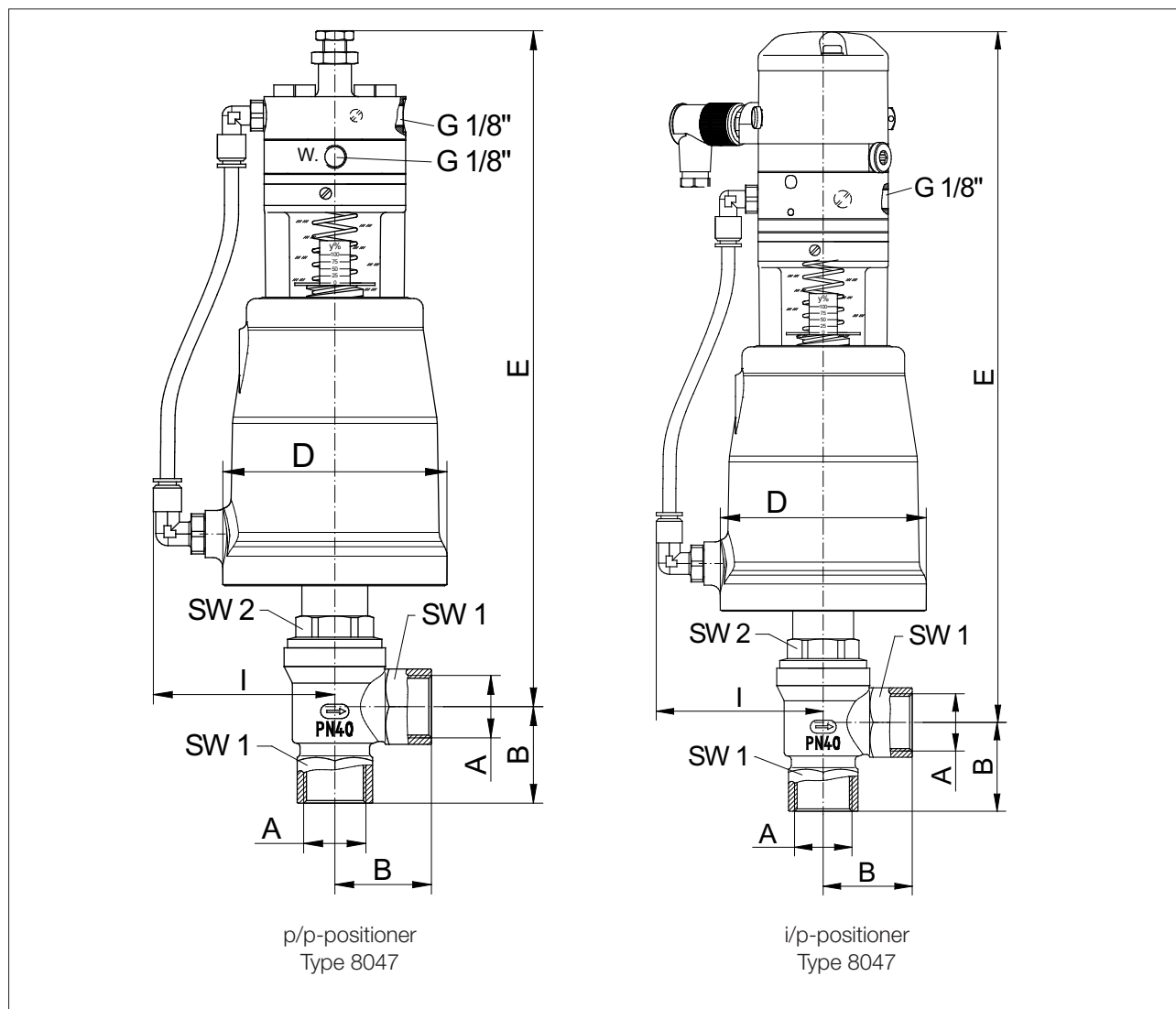
reinforced design (from DN50):

Ordering Example: 7051/050V7020C1-----S-----K
 Right angle control valve 7051, DN 50, pipe thread, body material stainless steel, seating seal PTFE, digital positioner 8049 4-wire, actuator 80 mm, linear flow characteristic, Kvs 100 %, Kvs-value 57, reinforced design

„K“ reinforced design

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

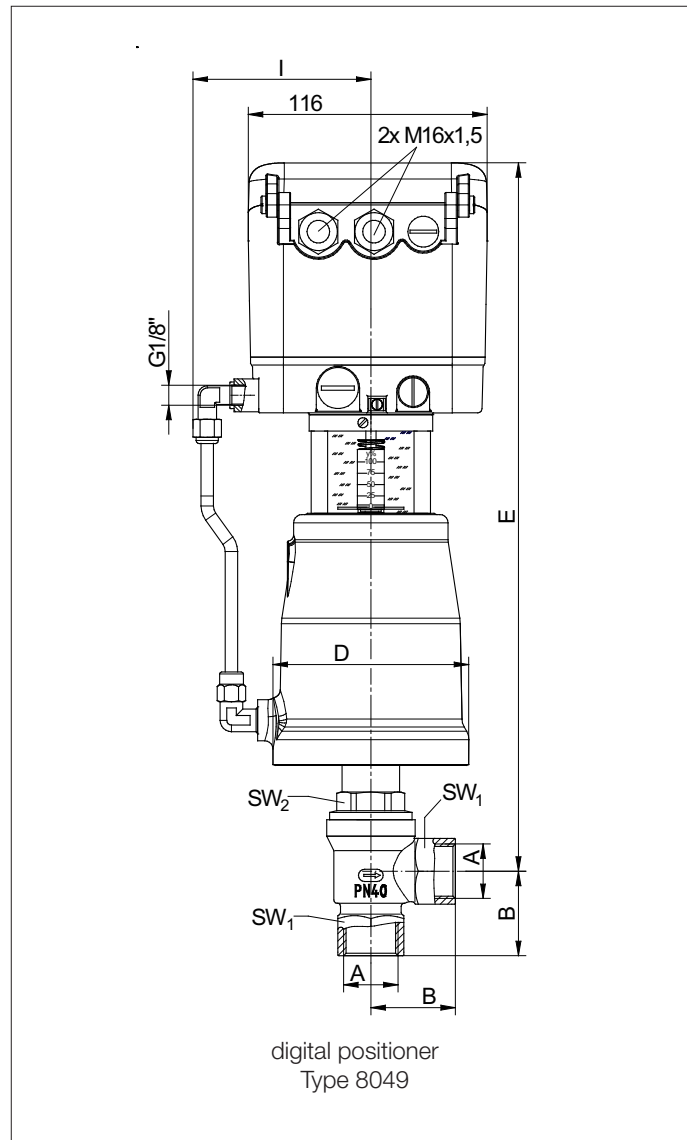
reinforced design:

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, 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	10	90	25	30	3,5	4,4
20	80	3/4"	41	96	344	13	90	32	30	8	4,5
25	80	1"	41	96	357	15	90	41	60	16	4,7
32	80	1 1/4"	65	96	357	18	90	50	30	24	5,0
32	125	1 1/4"	65	146	378	18	105	50	30	24	7,6
40	80	1 1/2"	65	96	361	24	90	55	32	35	5,3
40	125	1 1/2"	65	146	382	24	105	55	32	35	7,9

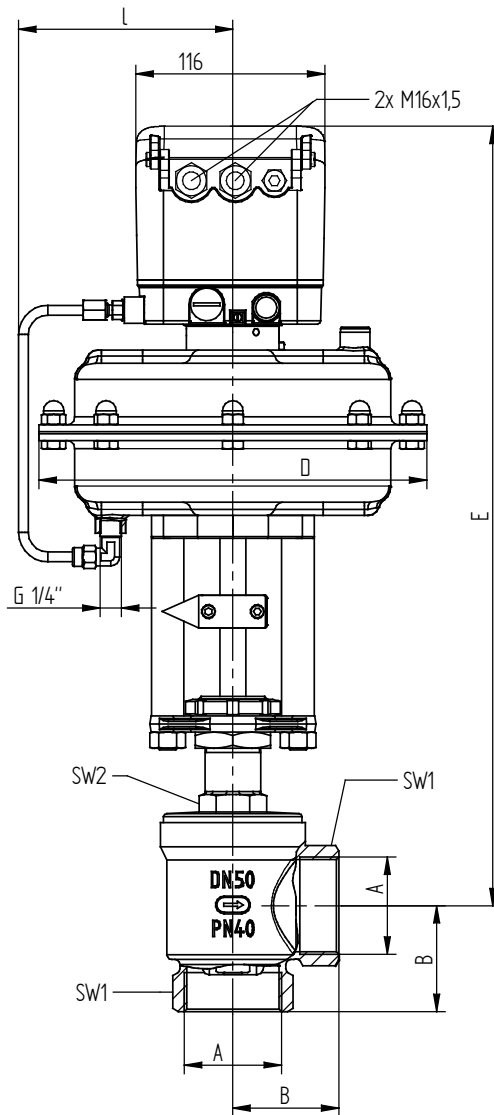
reinforced design:

50	80	2"	65	96	378	24	90	68	36	55	5,9
50	125	2"	65	146	399	24	105	68	36	55	8,5

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