

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. DIN / ISO	1/2" - 2"
Nominal pressure	PN 40
Media temperature	-30°C up to +170°C optional up to +200°C
Ambient temperature	-30°C up to +60°C
Viscosity of media	max. 600 mm ² /s (600cSt, 80°E)
Vacuum	> 0,001 bar abs
Working pressure for version without cavities	maximum 12 bar



Options

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

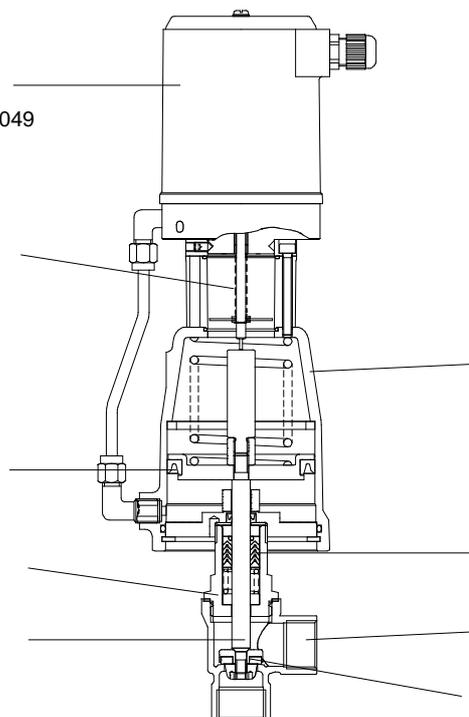
Positioners:
p/p-positioner Type 8047
i/p-positioner Type 8047
digital positioner Type 8048, 8049

position indicator
PA Trogamid (clear)

outer lip sealing

head section

piston rod
stainless steel
1.4571, roller
burnished



bonnet chrome plated brass
(actuators Ø 50 mm, Ø 80 mm)
aluminium, corrosion protected
(actuator Ø 125 mm),
option: reinforced plastic material
(actuators Ø 50 mm, 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

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	30 : 1	25 : 1	25 : 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 +60 °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

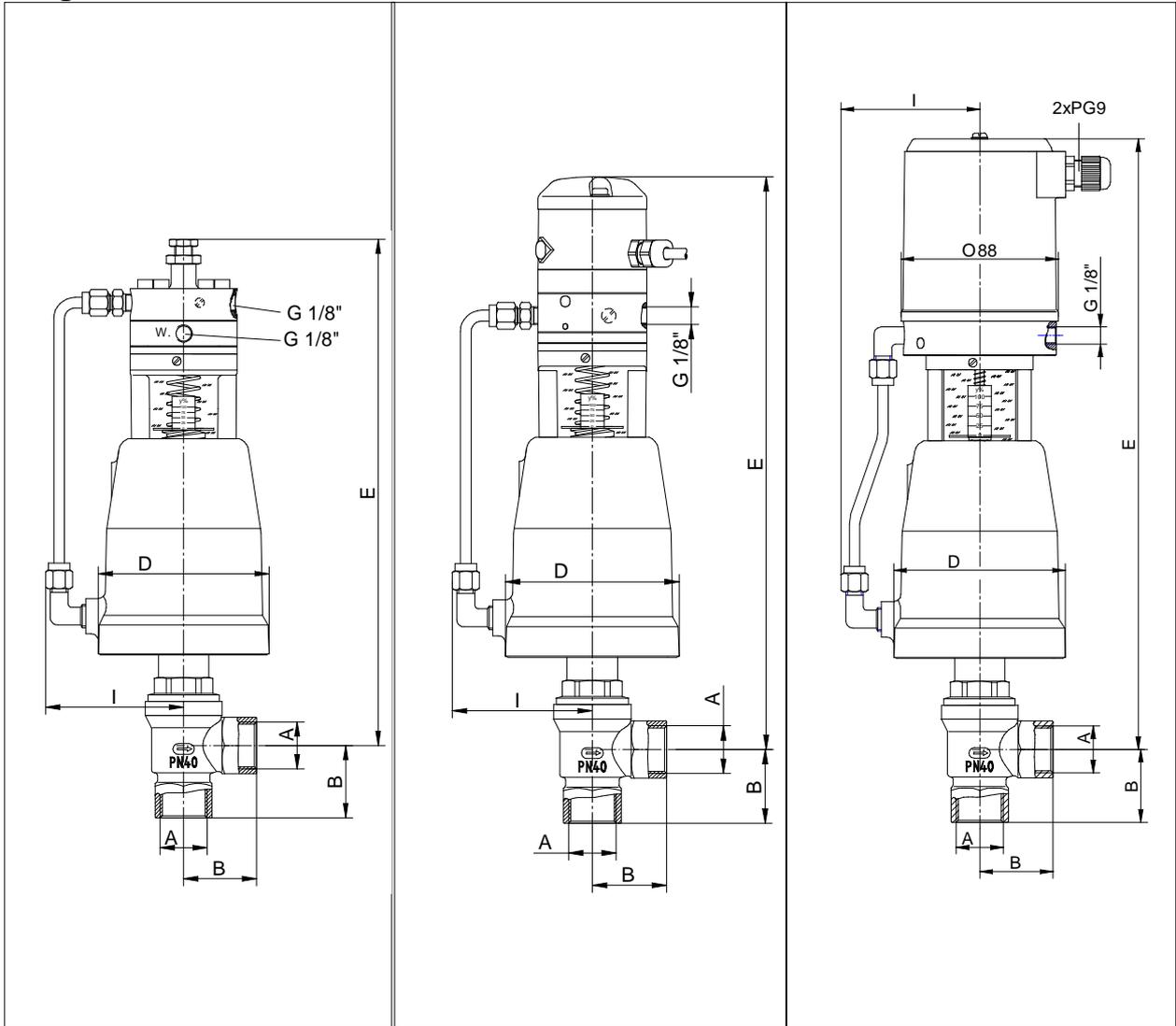
Kvs- Values

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	-	-	-

Right Angle Control Valve 7051

with integrated positioner

Weights and Dimensions



**p/p-positioner
Type 8047**

**i/p-positioner
Type 8047**

**digital positioner
Type 8048**

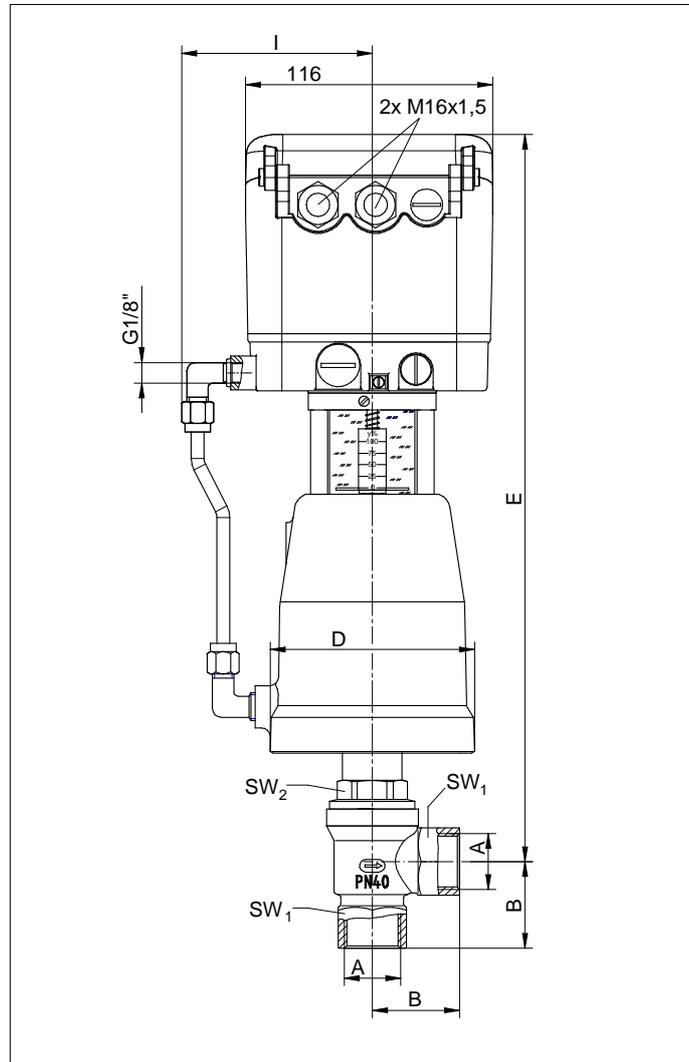
DN	Actuator	A	B	D	I	E			Weight (kg)			Stroke
						positioner			p/p	i/p	digital	
15	80	1/2"	41	96	80	281	318	347	3,7	4,0	4,1	10
20	80	3/4"	41	96	80	282	319	348	3,8	4,1	4,2	13
25	80	1"	41	96	80	295	332	361	4,0	4,3	4,4	15
32	80	1 1/4"	65	96	80	295	332	361	4,3	4,6	4,7	18
32	125	1 1/4"	65	146	105	315	352	381	6,9	7,2	7,3	18
40	80	1 1/2"	65	96	80	299	336	365	4,6	4,9	5,0	24
40	125	1 1/2"	65	146	105	319	356	385	7,2	7,5	7,6	24
50	80	2"	65	96	80	316	353	382	5,2	5,5	5,6	24
50	125	2"	65	96	80	316	353	382	5,2	5,5	5,6	24

Dimensions in mm

Right Angle Control Valve 7051

with integrated positioner

Weights and Dimensions



**digitaler Stellungsregler
Typ 8049**

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
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