

# Hygienic Angle Seat Control Valve 7025

with integrated positioner DN 15 - DN 50 - PN 40

**Pneumatically hygienic angle seat valve for the control of neutral through to aggressive media**

- Compact design
- All wetted parts made of stainless steel with Ra < 0,8 µm
- For temperatures from -50°C up to +180°C
- Operating pressures up to 25 bar
- FDA conform
- Rotable actuators
- Integrated positioner
- Avoiding of wake spaces
- Easy to clean



## Technical information

Nominal sizes	DN 15 up to DN 50
Body material	stainless steel 1.4408(CF8M), in hygienic design: wetted parts Ra < 0.8 µm
Connection	Welding ends acc. DIN (DIN 11850 series 2, DIN 11866 series A, EN 10357 series A) Welding ends acc. ISO (DIN EN ISO 1127, DIN 11866 series B, EN 10357 series C) Welding ends acc. ASME BPE (ASME BPE, DIN 11866 series C) Tri-Clamp-Connenction acc. DIN, ISO or inch (DIN 32676 series A, B or C; max. operating pressure 16 bar)
Nominal pressure	PN40
Fluid temperature*	-30°C up to +140°C (EPDM), -15°C up to +170°C (FKM), optionally -50°C up to 180°C
Ambient temperature	Digital positioner -10°C up to +75°C Analog positioner -15°C up to +60°C
Leakage acc. IEC 60534-4	Class VI
Specific leakage rate shaft and body sealing for head section with O-ring sealing	FKM: ISO FE-BH-CO3-SSA0-t(-15°C / +170 °C)-PN40-ISO 15848-1 EPDM: ISO FE-BH-CO3-SSA0-t(-30°C / +140 °C)-PN40-ISO 15848-1

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

## Materials

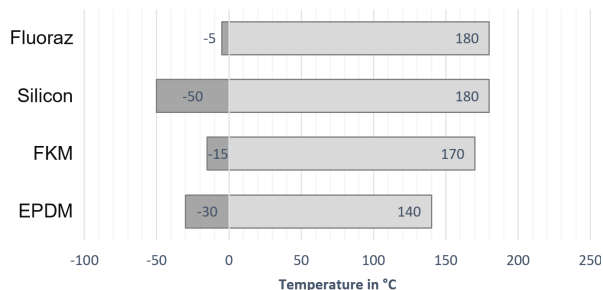
Body	Stainless steel 1.4408
Seating seal	PTFE
Bonnet	Brass chrome plated (actuator Ø 50 mm, 80 mm ) Aluminium corrosion protected (actuator Ø 125 mm )
Diaphragm actuator	Stainless steel 1.4301/1.4305
Actuator springs	Stainless steel 1.4310 (actuator Ø 80 mm, diaphr.act.) Spring steel wire C, plastic coated (actuator Ø 125 mm)
Packing	PTFE (carbon filled), spring 1.4310
Valve stem	Stainless steel 1.4571, roller burnished DN15 - DN40: ø10mm DN50: ø16mm (reinforced)
Position indicator	PA Trogamid (clear)

## Positioner

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

## Standard version with integrated positioner

### Temperature limits stem sealing



### Admissible differential pressure with positioner

DN	Piston Ø mm	Spring configuration Number	Digital positioner 8049		Analog positioner 8047	
			Differential pressure bar	Supply pressure range bar	Differential pressure bar	Supply pressure range bar
15	80	2	17	4 - 6	17	4 - 6
20	80	2	17	4 - 6	17	4 - 6
25	80	1	17	4 - 6	12	4 - 6
25	125	2	17	3 - 6	17	3 - 6
25	250	4	17	3 - 6	8,5	2,8 - 6
32	80	1	9,2	4 - 6	5,8	4 - 6
32	125	2	17	3 - 6	10	3 - 6
32	250	4	17	3 - 6	1,4*	2,8 - 6
32	250	6	-	-	16,5	2,8 - 6
40	80	1	5,3	4 - 6	2,9	4 - 6
40	125	3	17	4 - 6	12	4 - 6
40	250	6	17	3 - 6	8*	2,8 - 6
40	250	8	-	-	14	3,4 - 6
50	80	1	2	4 - 6	0,5	4 - 6
50	125	3	9,8	4 - 6	6,1	4 - 6
50	250	6	11,5*	4 - 6	4*	4 - 6
50	250	8	15,5	4 - 6	7,9*	4 - 6
50	250	10	-	-	11,5*	4 - 6
50	250	12	-	-	15,5	4 - 6

\*: Special springs

Higher differential pressures on request

### Admissible differential pressure, direct pressure range

DN	Differential pressure (NC) (bar)		Max. pressure (NO) (bar)		Supply air (bar)		Diaphragm area (cm <sup>2</sup> )
	spring range		spring range		spring range		
	0,2 - 1 bar	0,4 - 2 bar	0,2 - 1 bar	0,4 - 2 bar	0,2 - 1 bar	0,4 - 2 bar	
15	17	17	17	17	1,2	2,4	250
20	17	17	17	17	1,2	2,4	250
25	5,2	17	12	15	1,2	2,4	250
32	10	17	6	13	1,2	2,4	250
40	4,1	12	2	5	1,2	2,4	250
50	1,6	6,5	1	2	1,2	2,4	250

## Kvs-Values

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### with welding ends acc. DIN or ISO

DN	linear						equal percentage					
	15	20	25	32	40	50	15	20	25	32	40	50
100%	3,4	7,9	12,6	18,9	26,3	34	3,1	5,8	9,7	15,9	22,9	27,6
63%	-	-	-	-	-	22,4	-	-	-	-	-	20,8
40%	1,7	3,4	5,8	8,8	11,1	-	1,6	2,5	5	7,9	11,7	-
25%	1	-	3,2	-	-	-	-	-	3,7	-	-	-
15%	-	-	-	-	-	-	0,7	-	-	-	-	-
10%	0,4	-	-	-	-	-	-	-	-	-	-	-

### with welding ends acc. ASME BPE

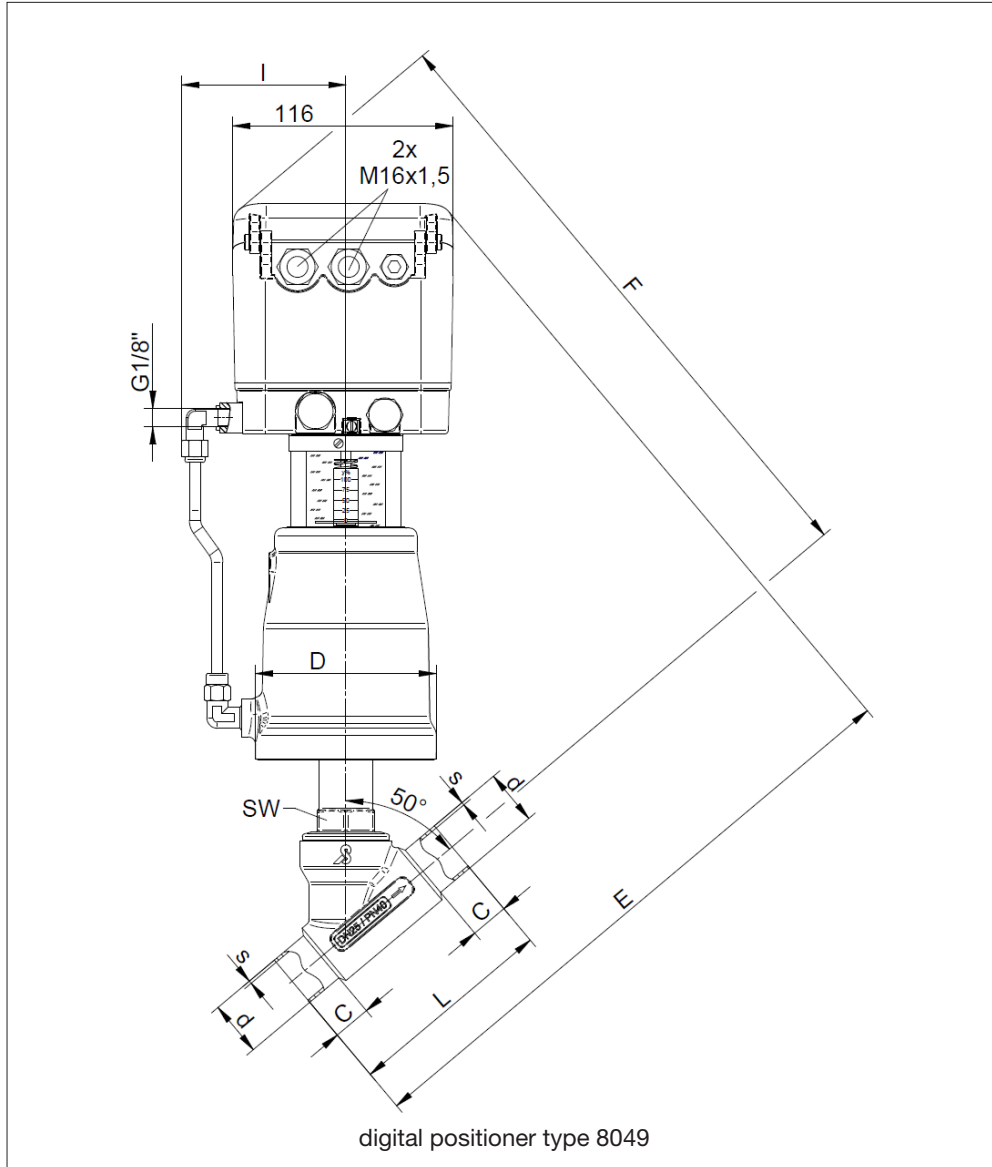
DN	linear						equal percentage					
	15	20	25	32	40	50	15	20	25	32	40	50
100%	1,7	6,1	11,6	-	26,9	32,5	1,6	5,1	9,2	-	22,8	26,8
63%	-	-	-	-	-	21,9	-	-	-	-	-	20,4
40%	-	3,1	5,4	-	11	-	-	2,3	5	-	11,8	-
25%	-	-	3,1	-	-	-	-	-	3,8	-	-	-



# Hygienic Angle Seat Control Valve 7025

## Standard version with integrated positioner

### Dimensions and weights



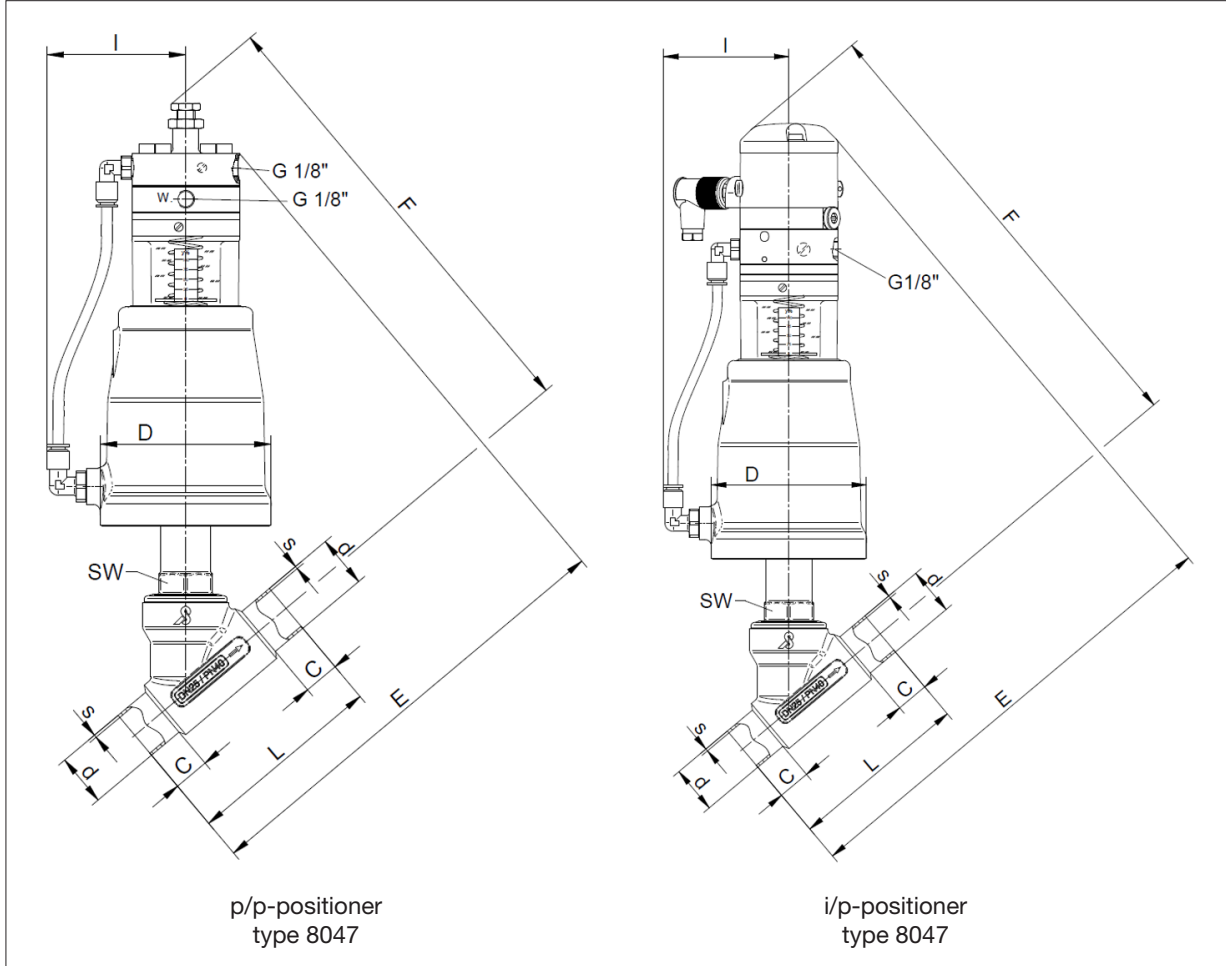
DN	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E	F	I	SW	Weight (kg)
		d	s	C	L	d	s	C	L	d	s	C	L						
15	80	19	1,5	20	90	21,3	1,6	20	90	12,7	1,65	20	90	96	310	321	80	30	4,4
20	80	23	1,5	20	100	26,9	1,6	20	100	19,05	1,65	20	100	96	318	326	80	30	4,5
25	80	29	1,5	20	110	33,7	2	20	110	25,4	1,65	20	110	96	324	330	80	30	4,7
32	80	35	1,5	20	120	42,4	2	20	120	-	-	-	-	96	338	344	80	30	5,0
32	125	35	1,5	20	120	42,4	2	20	120	-	-	-	-	146	351	360	105	30	7,6
40	80	41	1,5	25	140	48,3	2	25	140	38,1	1,65	25	140	96	348	349	80	30	5,3
40	125	41	1,5	25	140	48,3	2	25	140	38,1	1,65	25	140	146	361	365	105	30	7,9
50	80	53	1,5	25	160	60,3	2	25	160	50,8	1,65	25	160	96	374	371	80	36	5,9
50	125	53	1,5	25	160	60,3	2	25	160	50,8	1,65	25	160	146	388	387	105	36	8,5

# Hygienic Angle Seat Control Valve 7025



## Standard version with integrated positioner

### Dimensions and weights

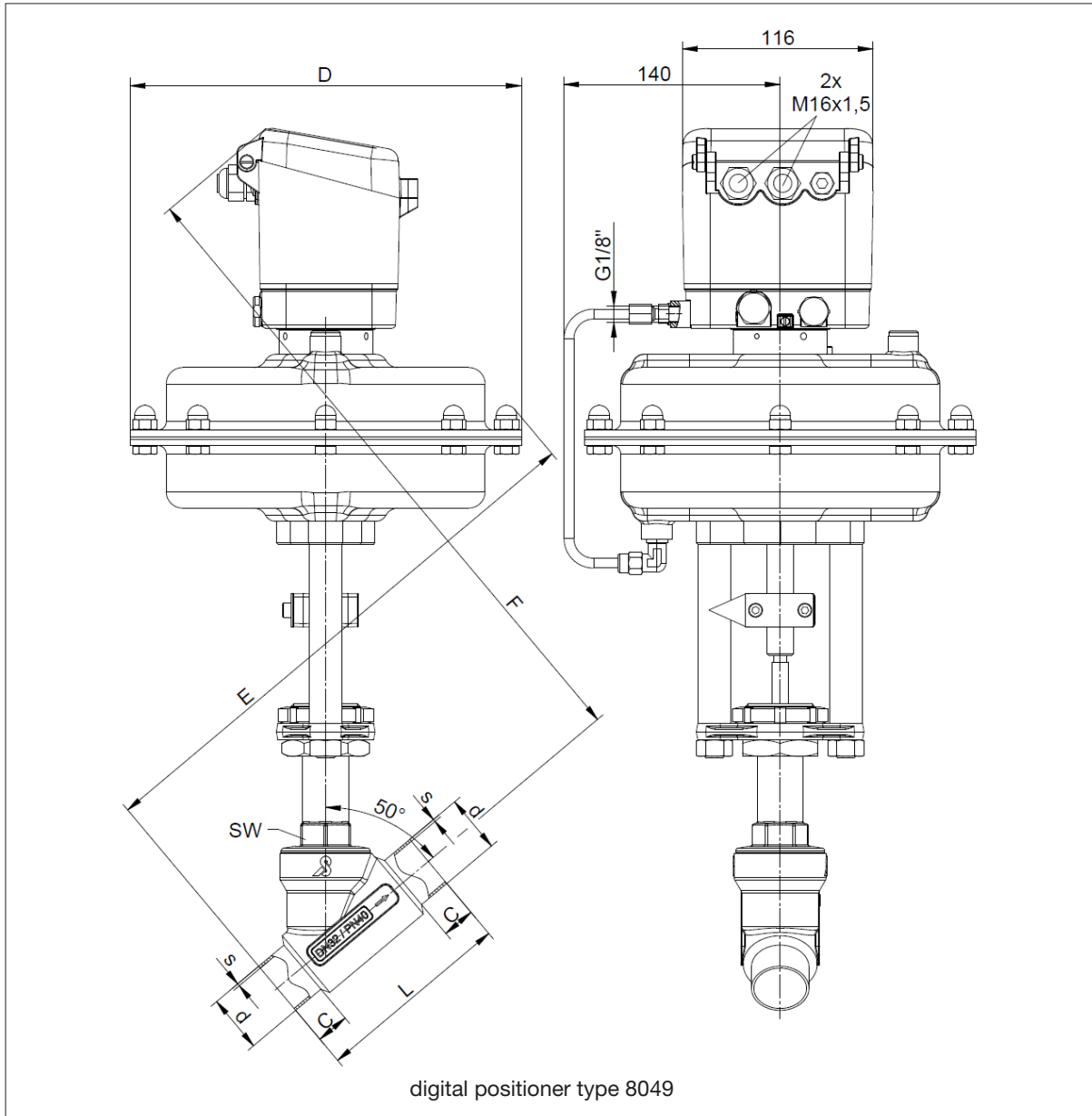


DN	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E		F		I	SW	Weight (kg)	
		d	s	C	L	d	s	C	L	d	s	C	L		Positioner	Positioner	p/p	i/p			p/p	i/p
															p/p	i/p	p/p	i/p				
15	80	19	1,5	20	90	21,3	1,6	20	90	12,7	1,65	20	90	96	240	271	248	280	80	30	4,1	4,4
20	80	23	1,5	20	100	26,9	1,6	20	100	19,05	1,65	20	100	96	248	279	253	285	80	30	4,2	4,5
25	80	29	1,5	20	110	33,7	2	20	110	25,4	1,65	20	110	96	254	285	257	289	80	30	4,4	4,7
32	80	35	1,5	20	120	42,4	2	20	120	-	-	-	-	96	268	299	271	303	80	30	4,7	5,0
32	125	35	1,5	20	120	42,4	2	20	120	-	-	-	-	146	281	312	287	319	105	30	7,3	7,6
40	80	41	1,5	25	140	48,3	2	25	140	38,1	1,65	25	140	96	278	309	276	308	80	30	5	5,3
40	125	41	1,5	25	140	48,3	2	25	140	38,1	1,65	25	140	146	291	322	292	324	105	30	7,6	7,9
50	80	53	1,5	25	160	60,3	2	25	160	50,8	1,65	25	160	96	292	323	283	315	80	36	5,6	5,9
50	125	53	1,5	25	160	60,3	2	25	160	50,8	1,65	25	160	146	306	337	299	331	105	36	8,2	8,5

# Hygienic Angle Seat Control Valve 7025

Standard version with integrated positioner

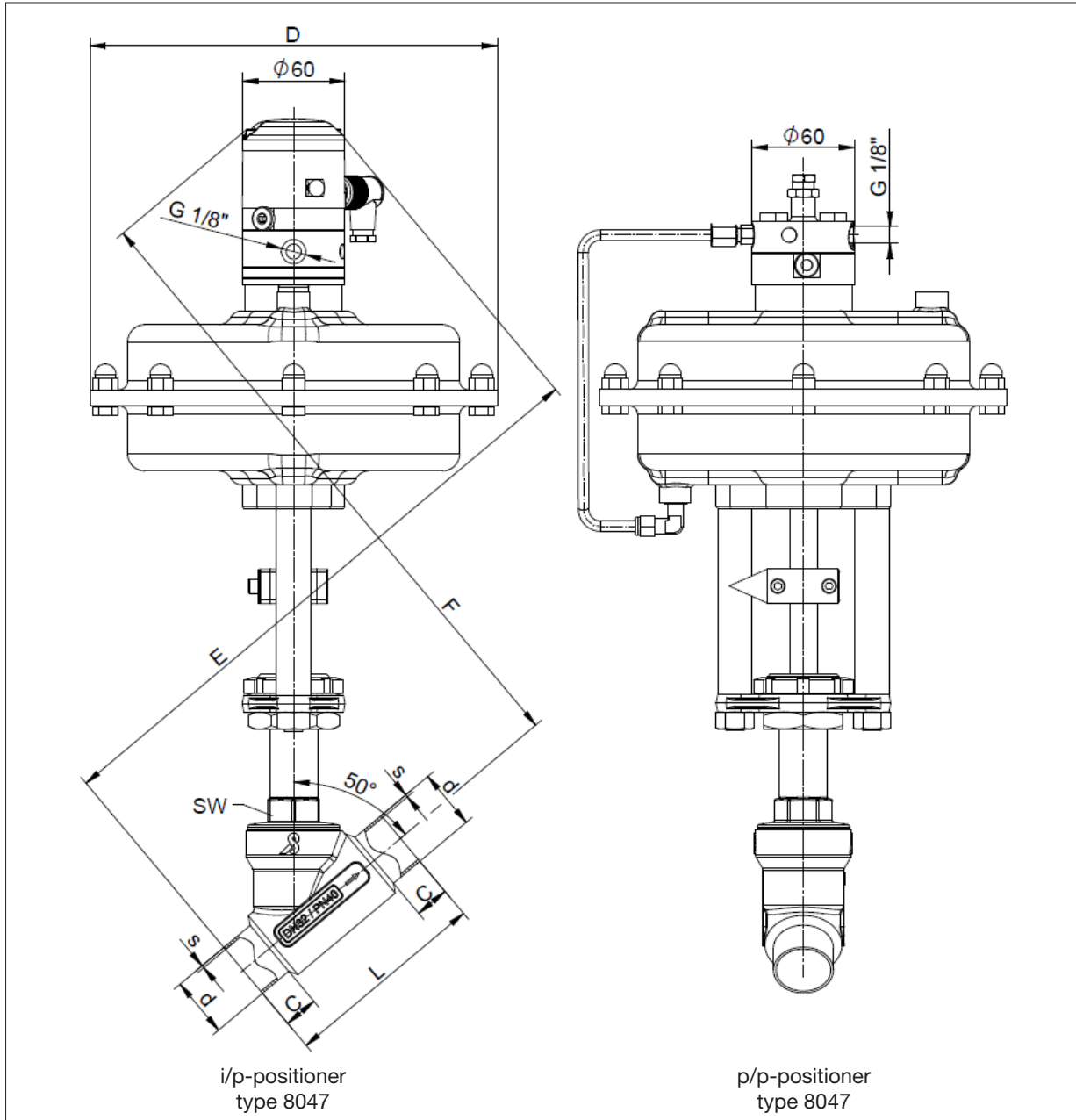
## Dimensions and weights



DN	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E	F	SW	Weight (kg)
		d	s	C	L	d	s	C	L	d	s	C	L					
15	D250	19	1,5	20	90	21,3	1,6	20	90	12,7	1,65	20	90	238	354	385	30	14,6
20	D250	23	1,5	20	100	26,9	1,6	20	100	19,05	1,65	20	100	238	362	387	30	14,7
25	D250	29	1,5	20	110	33,7	2	20	110	25,4	1,65	20	110	238	368	391	30	14,9
32	D250	35	1,5	20	120	42,4	2	20	120	-	-	-	-	238	337	405	30	15
40	D250	41	1,5	25	140	48,3	2	25	140	38,1	1,65	25	140	238	392	410	30	15,2
50	D250	53	1,5	25	160	60,3	2	25	160	50,8	1,65	25	160	238	418	432	36	15,5

## Standard version with integrated positioner

### Dimensions and weights

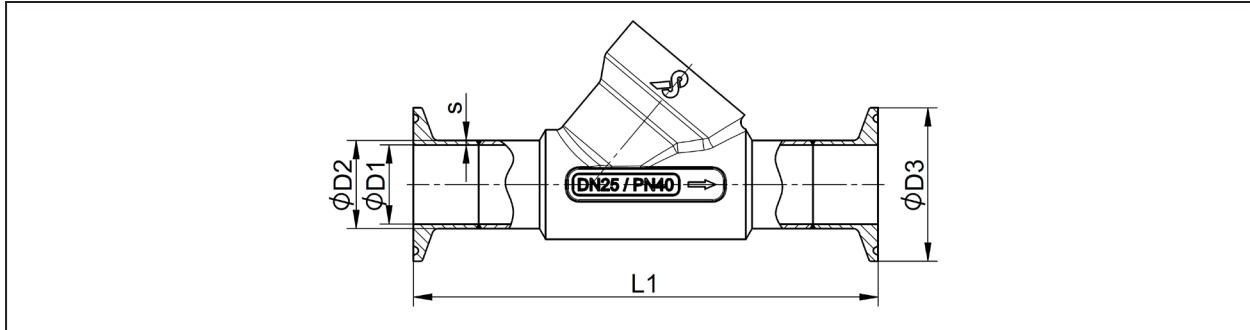


DN	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E		E		SW	Weight (kg)
		d	s	C	L	d	s	C	L	d	s	C	L		Positioner		Positioner			
															p/p	i/p	p/p	i/p		
15	D250	19	1,5	20	90	21,3	1,6	20	90	12,7	1,65	20	90	238	312	333	321	355	30	14,6
20	D250	23	1,5	20	100	26,9	1,6	20	100	19,05	1,65	20	100	238	319	340	326	360	30	14,7
25	D250	29	1,5	20	110	33,7	2	20	110	25,4	1,65	20	110	238	326	347	330	364	30	14,9
32	D250	35	1,5	20	120	42,4	2	20	120	-	-	-	-	238	340	361	345	378	30	15
40	D250	41	1,5	25	140	48,3	2	25	140	38,1	1,65	25	140	238	350	371	350	383	30	15,2
50	D250	53	1,5	25	160	60,3	2	25	160	50,8	1,65	25	160	238	376	397	371	405	36	15,5



## Body with clamp connection

### Dimensions



DN	Clamp connection acc. DIN Code: „N“					Clamp connection acc. ISO Code: „K“				
	L1	D1	D2	s	D3	L1	D1	D2	s	D3
15	126	16	19	1,5	34	116	18,1	21,3	1,6	34
20	136	20	23	1,5	34	133	23,7	26,9	1,6	50,5
25	153	26	29	1,5	50,5	143	29,7	33,7	2	50,5
32	163	32	35	1,5	50,5	153	38,4	42,4	2	50,5
40	183	38	41	1,5	50,5	163	44,3	48,3	2	64
50	203	50	53	1,5	64	206	56,3	60,3	2	77,5

Dimensions in mm

DN	Clamp-connection acc. Inch Code: „Z“				
	L1	D1	D2	s	D3
15	115,4	9,4	12,7	1,5	25
20	125,4	15,75	19,05	1,5	25
25	153	22,1	25,4	1,5	50,5
32	-	-	-	-	-
40	183	34,8	38,1	1,5	50,5
50	203	47,5	50,8	1,5	64

Dimensions in mm