

# Hygienic Angle Seat Control Valve 7025

with integrated positioner 1/2" - 2" - 580 psi

**Pneumatically operated 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 -58°F up to +356°F
- Operating pressures up to 360 psi
- FDA conform
- Rotable actuators
- Integrated positioner
- Avoiding of wake spaces
- Easy to clean



## Technical information

Nominal sizes	1/2" up to 2"
Body material	stainless steel 1.4408(CF8M), in hygienic design: wetted parts Ra< 0.8 µm
Connections	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)
Nominal pressure	580 psi
Fluid temperature*	-22°F up to +284°F (EPDM), -5°F up to +338°F (FKM), optionally -58°F up to 356°F
Ambient temperature	Digital positioner +14°F up to +176°F
	Analog positioner +5°F up to +140°F
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 CF8M
Seating seal	PTFE
Bonnet	Brass chrome plated (actuator Ø 2", 3")
	Aluminium corrosion protected (actuator Ø 5")
Diaphragm actuator	Stainless steel ASTM A313 304
Actuator springs	Stainless steel ASTM A313 302 (actuator Ø 3", diaph. act.)
	Spring steel wire C, plastic coated (actuator Ø 5")
Packing	PTFE (carbon filled), spring ASTM A313 302
Valve stem	Stainless steel 316 Ti, roller burnished
	Size 1/2" - 1 1/2": ø10mm Size 2": ø16mm (reinforced)
Position indicator	PA Trogamid (clear)

## Positioner

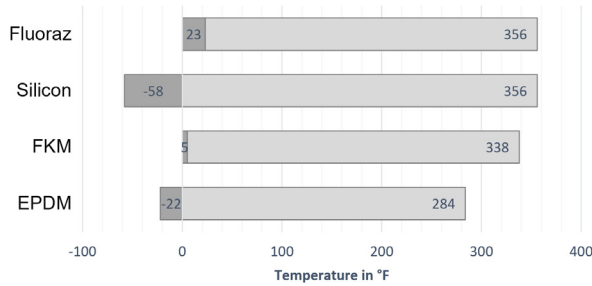
For technical information on our positioners please refer to the corresponding data sheets.

# Hygienic Angle Seat Control Valve 7025



Standard version with integrated positioner

## Temperature limits stem sealing



## Admissible differential pressure with positioner

Size	Piston Ø inch	Spring configuration Number	Digital positioner 8049		Analog positioner 8047	
			Differential pressure psi	Supply pressure range bar	Differential pressure bar	Supply pressure range bar
			1/2"	3"	2	250
3/4"	3"	2	250	60 - 90	250	60 - 90
1"	3"	1	250	60 - 90	175	60 - 90
1"	5"	2	250	45 - 90	250	45 - 90
1"	10"	4	250	45 - 90	160	40 - 90
1 1/4"	3"	1	130	60 - 90	85	60 - 90
1 1/4"	5"	2	250	45 - 90	145	45 - 90
1 1/4"	10"	4	250	45 - 90	20*	40 - 90
1 1/4"	10"	6	-	-	235	40 - 90
1 1/2"	3"	1	77	60 - 90	43	60 - 90
1 1/2"	5"	3	250	60 - 90	180	60 - 90
1 1/2"	10"	6	250	45 - 90	115*	40 - 90
1 1/2"	10"	8	-	-	205	50 - 90
2"	3"	1	29	60 - 90	8	60 - 90
2"	5"	3	140	60 - 90	89	60 - 90
2"	10"	6	165*	60 - 90	58*	60 - 90
2"	10"	8	225	60 - 90	110*	60 - 90
2"	10"	10	-	-	170*	60 - 90
2"	10"	12	-	-	225	60 - 90

\*: Special springs  
Higher differential pressures on request

## Admissible differential pressure, direct pressure range

Size	Differential pressure (NC) (psi)		Differential pressure (NO) (psi)		Supply air (psi)		Actuator size
	spring range		spring range		spring range		
	3 - 15 psi	6 - 29 psi	3 - 15 psi	6 - 29 psi	3 - 15 psi	6 - 29 psi	
1/2"	250	250	250	250	18	35	10"
3/4"	250	250	250	250	18	35	10"
1"	76	250	175	230	18	35	10"
1 1/4"	145	250	100	200	18	35	10"
1 1/2"	60	175	40	75	18	35	10"
2"	24	93	15	30	18	35	10"

# Hygienic Angle Seat Control Valve 7025



## Cvs-values

### with welding ends acc. DIN or ISO

Size	linear						equal percentage					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
100%	3.9	9.2	14.6	21.9	30.5	39.4	3.6	6.7	11.3	18.4	26.6	32
63%	-	-	-	-	-	26	-	-	-	-	-	24.1
40%	2	3.9	6.7	10.2	12.9	-	1.9	3	5.9	9.2	13.6	-
25%	1.2	-	3.7	-	-	-	-	-	4.3	-	-	-
15%	-	-	-	-	-	-	0.8	-	-	-	-	-
10%	0.5	-	-	-	-	-	-	-	-	-	-	-

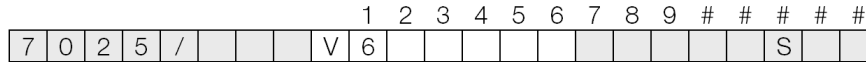
### with welding ends acc. ASME BPE

Size	linear						equal percentage					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
100%	2	7.1	13.5	-	30.9	37.8	1.9	6	10.7	-	26.5	31.1
63%	-	-	-	-	-	25.4	-	-	-	-	-	23.7
40%	-	3.6	6.3	-	12.8	-	-	2.7	6	-	13.7	-
25%	-	-	3.6	-	-	-	-	-	4.4	-	-	-

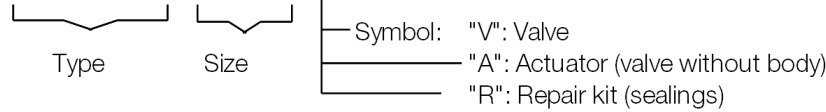
# Hygienic Angle Seat Control Valve 7025



## Ordering number system



1 - 6 : Please quote all 6 sections.  
7 - 14: Quote only if required.



1.	Body type	2.	Connection	3.	Body materials	4.	Seat material	5.	Positioner	6.	Actuator	7.	Springs
6	angle body control valve	D	with welding ends acc. DIN (DIN 11866 series A)	2	Stainless steel 1.4408 (CF8M) in hygienic design - wetted parts Ra < 0,8µm	0	PTFE (FDA, EC-Regulation 1935/2004)	6	p/p positioner, Type 8047	8	piston 3" (NPT)	-	without significance
		E	with welding ends acc. ASME BPE (DIN 11866 Series C)					7	i/p positioner, Type 8047	9	piston 5" (NPT)	1	spring to open (only with digital positioner)
		H	with welding ends acc. ISO (DIN 11866 series B)	3	stainless steel 1.4408 (CF8M)			8	i/p positioner with plug connection M12x1, Type 8047	D	diaphragm D 10" (NPT)	P	spring set 3-15 psi (10")
								9	i/p positioner ex-proof (II 2 G Eex ib IIC T6), plug connection M12x1, Type 8047			Q	spring set 6-30 psi (10")
								B	digital positioner Type 8049, 4 wire, with Bluetooth communication module			R	4 springs (10")
								C	digital positioner, Type 8049, 4 wire			T	6 springs (10")
								R	digital positioner Type 8049, 2 wire			W	8 springs (10")
								W	digital positioner Type 8049-ExPro, ATEX, IECEX			X	10 springs (10")
								K	digital positioner Type 8049-ExPro-FM base plate in stainless steel; IS Cl. I Div. 1, Cl. I Zone 0 AEx ia			Y	12 springs (10")
								Y	digital positioner Type 8049-ExPro-FM base plate in stainless steel; NI Cl. I Div. 2				
								N	digital positioner Type 8049 IO-Link version				

8.	Characteristic	9.	Stem sealing	10.	Cv-value	11.	Accessories	12.	Special versions	13.	Head section	14.	Position indicator
-	linear equal percentage	-	Standard - O-ring in EPDM -22 up to +284°F (FDA, EC-Regulation 1935/2004)	-	full Cv-value	-	without pilot-valve	S	to state if some stations are quoted!	-	standard head section seal	-	standard
1		1	O-ring in FKM +5 up to +338°F (FDA, EC-Regulation 1935/2004)	1	red. to 40%	6	DN2 230V AC			1	Klingersil Top-chem 2000 head section with O-ring sealing		
		2	O-ring in silicon -58 up to +356°F (FDA)	2	red. to 25%								
		4	O-ring in fluoraz +23 up to +356°F (FDA)	3	red. to 15%	7	DN2 24V DC						
				6	red. to 10%								
				A	Special version								

Ordering example: 7025/025V6E20C8

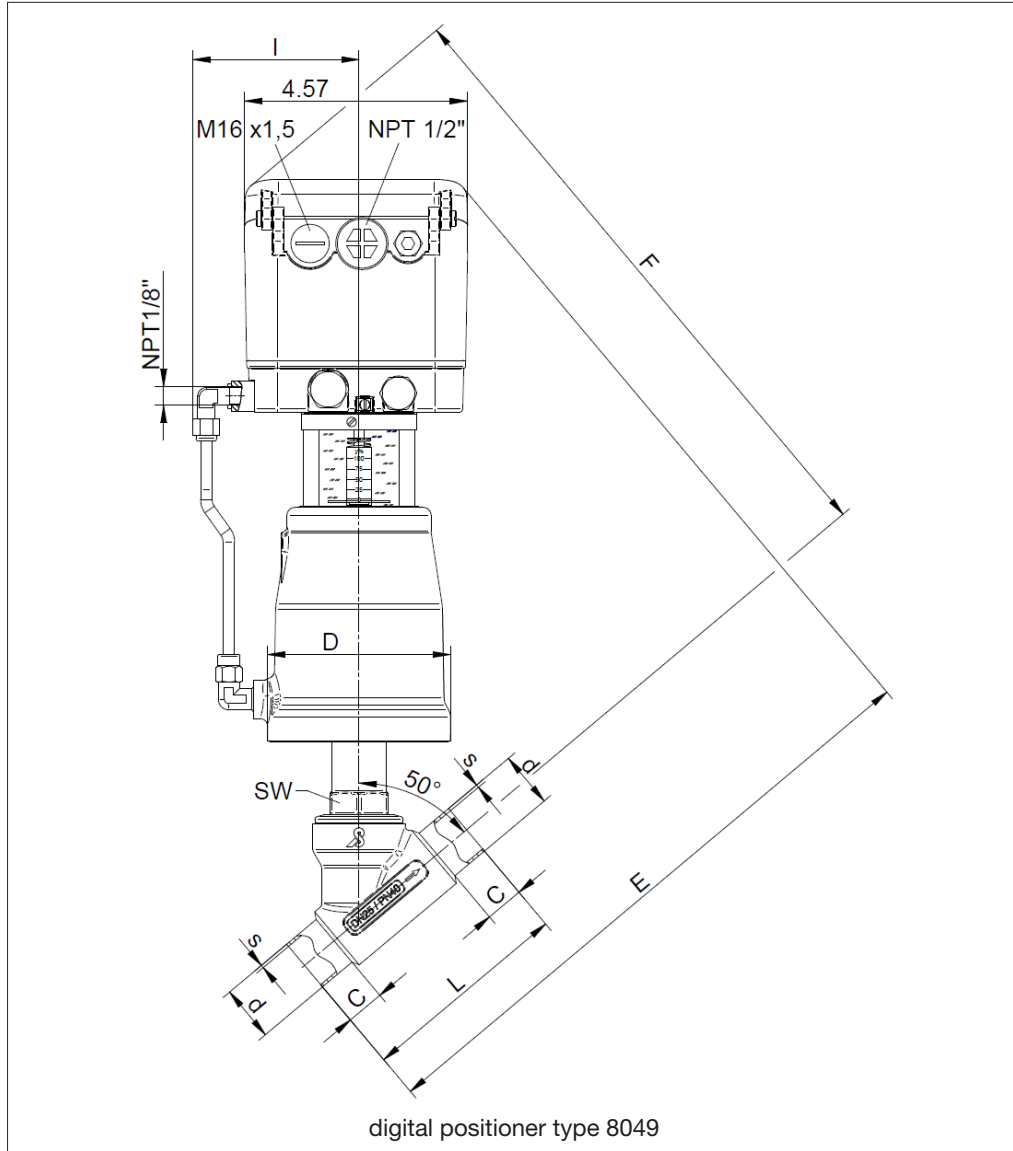
Hygienic angle seat control valve type 7025, size 1", with welding ends acc. ASME BPE (DIN 11866 series C), body material stainless steel 1.4408 (CF8M) in hygienic version - wetted parts Ra < 0,8 µm, 316 Ti, seating seal PTFE, digital positioner type 8049, 4-wire, piston actuator 3" (NPT), linear characteristic, Cvs-value 16,2, stem sealing standard-o-ring in EPDM -22°F up to +284°F (FDA, EG-regulation 1935/2004)

# Hygienic Angle Seat Control Valve 7025



Standard version with integrated positioner

## Dimensions and weights



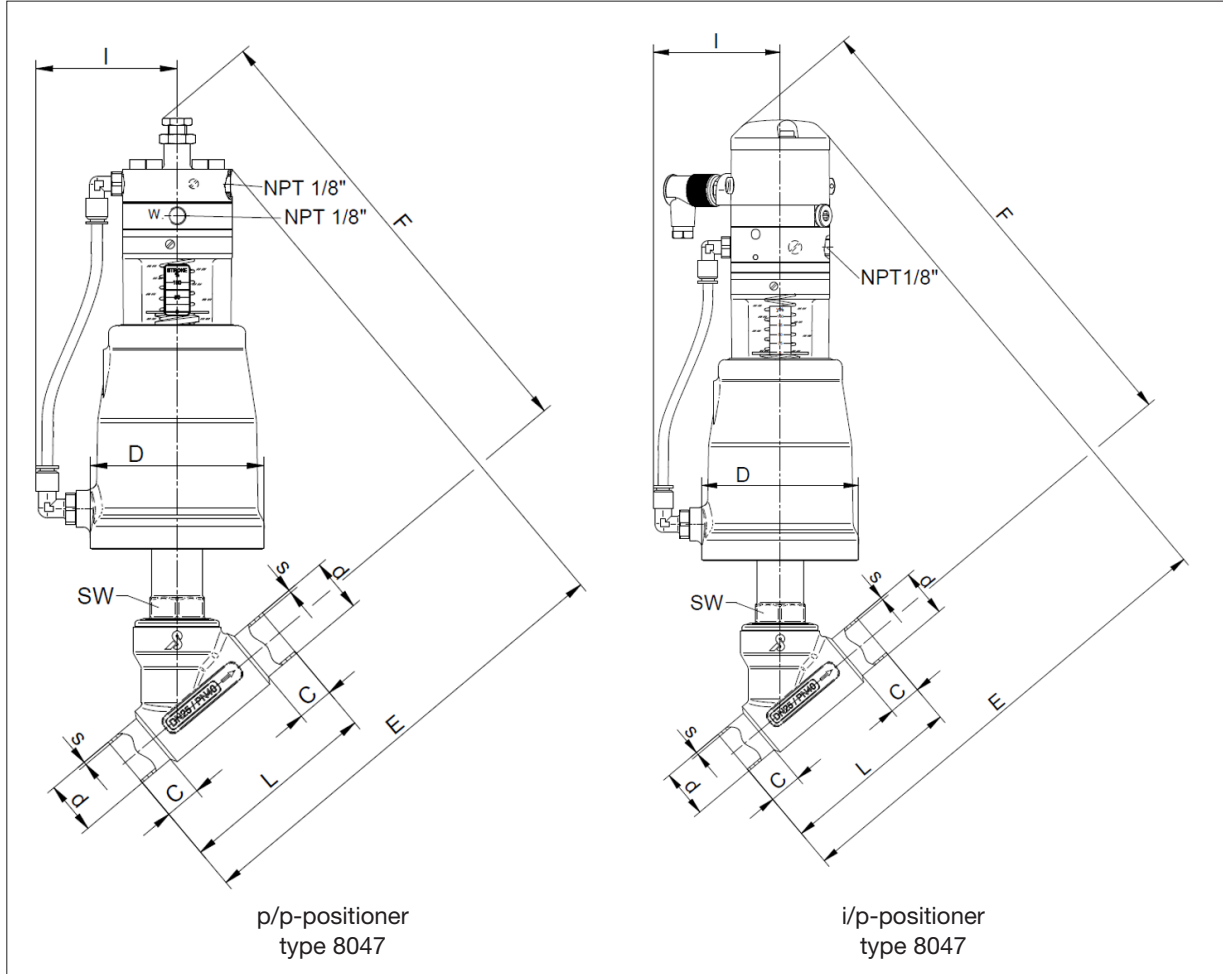
Size	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E	F	I	SW	Weight (lbs)
		d	s	C	L	d	s	C	L	d	s	C	L						
1/2"	3"	0.75	0.06	0.79	3.54	0.84	0.06	0.79	3.54	0.5	0.06	0.79	3.54	3.78	12.2	12.64	3.15	1.18	9.7
3/4"	3"	0.91	0.06	0.79	3.94	1.06	0.06	0.79	3.94	0.75	0.06	0.79	3.94	3.78	12.52	12.83	3.15	1.18	9.9
1"	3"	1.14	0.06	0.79	4.33	1.33	0.08	0.79	4.33	1	0.06	0.79	4.33	3.78	12.76	12.99	3.15	1.18	10.3
1 1/4"	3"	1.38	0.06	0.79	4.72	1.67	0.08	0.79	4.72	-	-	-	-	3.78	13.31	13.54	3.15	1.18	11
1 1/4"	5"	1.38	0.06	0.79	4.72	1.67	0.08	0.79	4.72	-	-	-	-	5.75	13.82	14.17	4.13	1.18	16.7
1 1/2"	3"	1.61	0.06	0.98	5.51	1.9	0.08	0.98	5.51	1.5	0.06	0.98	5.51	3.78	13.7	13.74	3.15	1.18	11.7
1 1/2"	5"	1.61	0.06	0.98	5.51	1.9	0.08	0.98	5.51	1.5	0.06	0.98	5.51	5.75	14.21	14.37	4.13	1.18	17.4
2"	3"	2.09	0.06	0.98	6.3	2.37	0.08	0.98	6.3	2	0.06	0.98	6.3	3.78	14.72	14.61	3.15	1.42	13
2"	5"	2.09	0.06	0.98	6.3	2.37	0.08	0.98	6.3	2	0.06	0.98	6.3	5.75	15.28	15.24	4.13	1.42	18.7

# Hygienic Angle Seat Control Valve 7025



Standard version with integrated positioner

## Dimensions and weights



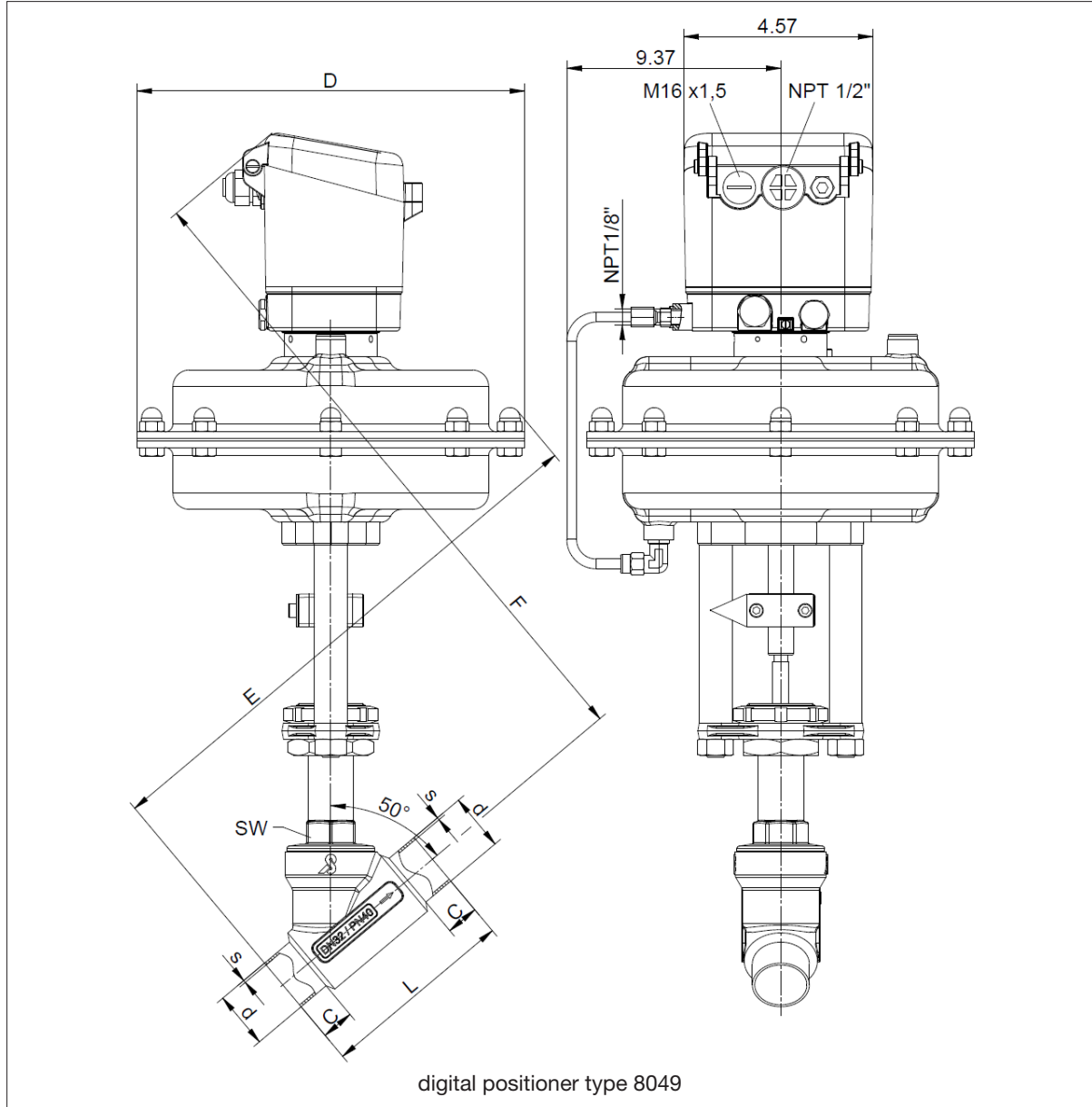
Size	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E		F		I	SW	Weight (lbs)	
		d	s	C	L	d	s	C	L	d	s	C	L		Positioner		Positioner				p/p	i/p
															p/p	i/p	p/p	i/p				
1/2"	3"	0.75	0.06	0.79	3.54	0.84	0.06	0.79	3.54	0.5	0.06	0.79	3.54	3.78	9.45	10.67	9.76	11.02	3.15	1.18	9	9.7
3/4"	3"	0.91	0.06	0.79	3.94	1.06	0.06	0.79	3.94	0.75	0.06	0.79	3.94	3.78	9.76	10.98	9.96	11.22	3.15	1.18	9.2	9.9
1"	3"	1.14	0.06	0.79	4.33	1.33	0.08	0.79	4.33	1	0.06	0.79	4.33	3.78	10	11.22	10.12	11.38	3.15	1.18	9.7	10.3
1 1/4"	3"	1.38	0.06	0.79	4.72	1.67	0.08	0.79	4.72	-	-	-	-	3.78	10.55	11.77	10.67	11.93	3.15	1.18	10.3	11
1 1/4"	5"	1.38	0.06	0.79	4.72	1.67	0.08	0.79	4.72	-	-	-	-	5.75	11.06	12.28	11.3	12.56	4.13	1.18	16.1	16.7
1 1/2"	3"	1.61	0.06	0.98	5.51	1.9	0.08	0.98	5.51	1.5	0.06	0.98	5.51	3.78	10.94	12.17	10.87	12.13	3.15	1.18	11	11.7
1 1/2"	5"	1.61	0.06	0.98	5.51	1.9	0.08	0.98	5.51	1.5	0.06	0.98	5.51	5.75	11.46	12.68	11.5	12.76	4.13	1.18	16.7	17.4
2"	3"	2.09	0.06	0.98	6.3	2.37	0.08	0.98	6.3	2	0.06	0.98	6.3	3.78	11.5	12.72	11.14	12.4	3.15	1.42	12.3	13
2"	5"	2.09	0.06	0.98	6.3	2.37	0.08	0.98	6.3	2	0.06	0.98	6.3	5.75	12.05	13.27	11.77	13.03	4.13	1.42	18	18.7

# Hygienic Angle Seat Control Valve 7025



Standard version with integrated positioner

## Dimensions and weights



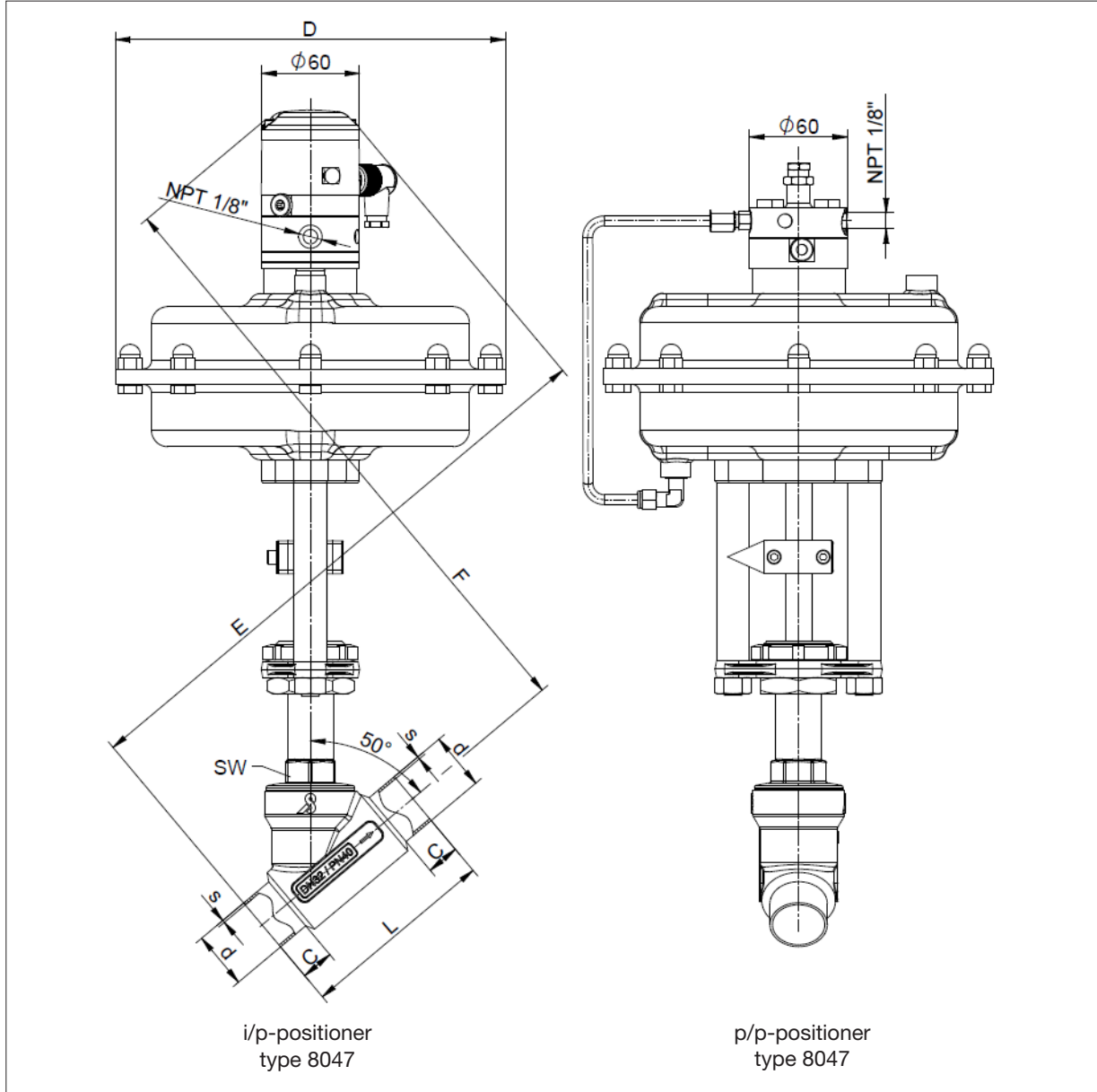
Size	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E	F	SW	Weight (lbs)
		d1	s	C	L	d1	s	C	L	d1	s	C	L					
1/2"	10"	0.75	0.06	0.79	3.54	0.84	0.06	0.79	3.54	0.5	0.06	0.79	3.54	9.37	13.94	15.16	1.18	32.19
3/4"	10"	0.91	0.06	0.79	3.94	1.06	0.06	0.79	3.94	0.75	0.06	0.79	3.94	9.37	14.25	15.24	1.18	32.41
1"	10"	1.14	0.06	0.79	4.33	1.33	0.08	0.79	4.33	1	0.06	0.79	4.33	9.37	14.49	15.39	1.18	32.85
1 1/4"	10"	1.38	0.06	0.79	4.72	1.67	0.08	0.79	4.72	-	-	-	-	9.37	13.27	15.94	1.18	33.07
1 1/2"	10"	1.61	0.06	0.98	5.51	1.9	0.08	0.98	5.51	1.5	0.06	0.98	5.51	9.37	15.43	16.14	1.18	33.51
2"	10"	2.09	0.06	0.98	6.3	2.37	0.08	0.98	6.3	2	0.06	0.98	6.3	9.37	16.46	17.01	1.42	34.17

# Hygienic Angle Seat Control Valve 7025



Standard version with integrated positioner

## Dimensions and weights

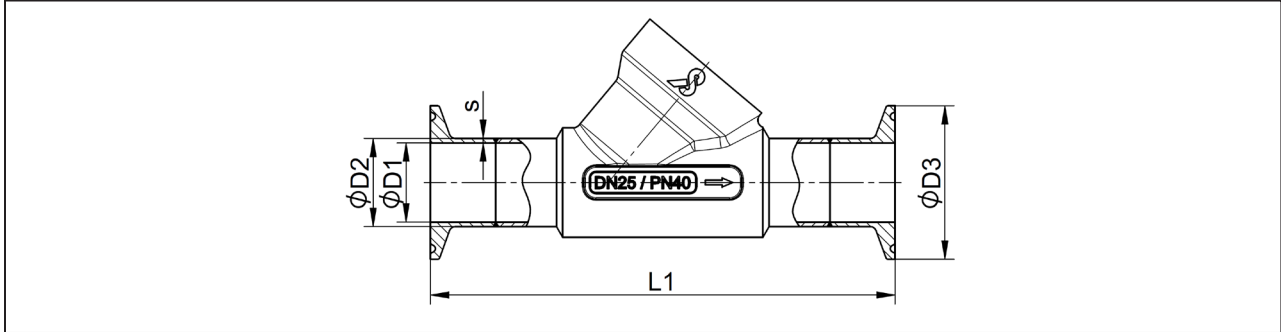


Size	Actuator	Welding ends acc DIN				Welding ends acc ISO				Welding ends acc ASME BPE				D	E		E		SW	Weight (lbs)
		d1	s	C	L	d1	s	C	L	d1	s	C	L		Positioner		Positioner			
															p/p	i/p	p/p	i/p		
1/2"	5"	0.75	0.06	0.79	3.54	0.84	0.06	0.79	3.54	0.5	0.06	0.79	3.54	9.37	12.28	13.11	12.64	13.98	1.18	32.19
3/4"	5"	0.91	0.06	0.79	3.94	1.06	0.06	0.79	3.94	0.75	0.06	0.79	3.94	9.37	12.56	13.39	12.83	14.17	1.18	32.41
1"	5"	1.14	0.06	0.79	4.33	1.33	0.08	0.79	4.33	1	0.06	0.79	4.33	9.37	12.83	13.66	12.99	14.33	1.18	32.85
1 1/4"	5"	1.38	0.06	0.79	4.72	1.67	0.08	0.79	4.72	-	-	-	-	9.37	13.39	14.21	13.58	14.88	1.18	33.07
1 1/2"	5"	1.61	0.06	0.98	5.51	1.9	0.08	0.98	5.51	1.5	0.06	0.98	5.51	9.37	13.78	14.61	13.78	15.08	1.18	33.51
2"	5"	2.09	0.06	0.98	6.3	2.37	0.08	0.98	6.3	2	0.06	0.98	6.3	9.37	14.8	15.63	14.61	15.94	1.42	35.27



## 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
1/2" (15)	4.96	0.63	0.75	0.06	1.34	4.57	0.71	0.84	0.06	1.34
3/4" (20)	5.35	0.79	0.91	0.06	1.34	5.24	0.93	1.06	0.06	1.99
1" (25)	6.02	1.02	1.14	0.06	1.99	5.63	1.17	1.33	0.08	1.99
1 1/4" (32)	6.42	1.26	1.38	0.06	1.99	6.02	1.51	1.67	0.08	1.99
1 1/2" (40)	7.20	1.5	1.61	0.06	1.99	6.42	1.74	1.90	0.08	2.52
2" (50)	7.99	1.97	2.09	0.06	2.52	8.11	2.22	2.37	0.08	3.05

Dimensions in inch

DN	Clamp-connection acc. Inch Code: „Z“				
	L1	D1	D2	s	D3
1/2" (15)	4.54	0.37	0.50	0.65	0.98
3/4" (20)	4.94	0.62	0.75	0.65	0.98
1" (25)	6.02	0.87	1	0.65	1.99
1 1/4" (32)	-	-	-	-	-
1 1/2" (40)	7.20	1.37	1.5	0.65	1.99
2" (50)	7.99	1.87	2	0.65	2.52

Dimensions in inch