

Hygienic Right Angle Valve 6052

1/2" up to 2"
with 3A-conformance



Pneumatic control valve in right angle design.
For dairy applications as well as applications in the pharmaceutical, food and beverage industry.

- Integral digital positioner type 8049 (or as shut-off valve)
- Perfect cleanability by optimized flow condition in relation to constant high wall shear stress
- 3A-authorized design for easy cleaning or sterilizing in place
- Body made from non-porous barstock material
- Medium is sealed by the diaphragm
- Solid design of the diaphragm for extreme variations in temperature
- High chemical resistance by a composite diaphragm made of PTFE and reinforced EPDM
- Simple and smart design
- Customer-friendly maintenance
- Wetted parts are FDA conformant, comply with the USP class VI and regulations (EG) 1935/2004 and (EU) 10/2011
- Also available with the function normally open for CIP/SIP-cleaning with non-pressurized actuator.
- Suitable for vacuum applications



Technical Information Valve

Body material	Stainless steel 316L (1.4435)	
Nominal sizes	1/2" up to 2"	
Connections	Welding ends ASME BPE OD-tubing Clamp connection acc. ASME-BPE	
Nominal pressure	235 psi	
Diaphragm	Reinforced EPDM diaphragm with PTFE-foil (fluidside)	
Fluid temperature	-4°F up to +284°F	
ambient temperature	digital positioner +14°F up to +167°F analog positioner +5°F up to +140°F	
Rangeability	50 : 1	
Vacuum	maximum 0.0295 mercury (Hg)	
Hysteresis	< 0.5 %	
Surfaces in contact with media	Ra 24 µin electropolished Ra 16 µin (optional for housing)	
Surfaces outside	Housing parts:	Ra 47 µin
	Piston actuators:	Casting surface (standard)
		polished Ra 31 µin (optional)
	Diaphragm actuators:	plate thermoformed
polished Ra 31 µin (optional)		
Leakage acc. EN 12266-1	leakage class A	

Positioner

For the technical data of the positioners, please refer to the Type 8049 Data Sheet

Materials

Valve body	Stainless steel 316L (1.4435)
Actuator	Stainless steel 316L (1.4408) (optional: polished)
Diaphragm actuator	Stainless steel ASTM A313 304 (optional: polished)
Actuator springs	Stainless steel ASTM A313 301
Valve stem	Stainless steel 316 Ti
Control plug	PEEK
Clamp-connection	Stainless steel 316L (1.4435)
Body positioner	Aluminium, filled PA, optional: stainless steel 303
Body position indicator	PA Polyamid (clear)

Hygienic Right Angle Control Valve 6052



with 3A-conformance

CVS-values

characteristic	linear					equal percentage				
	1/2"	3/4"	1"	1 1/2"	2"	1/2"	3/4"	1"	1 1/2"	2"
Size	3	4,6	11,6	27,7	46,4	2,9	4,6	11,48	21,3	37
100%										
reduced (63 %)	2,67	2,67	6,5	18,6	-	2,9	2,9	7,3	16,8	-
reduced (40 %)	1,45	1,45	4,6	11,6	-	1,9	1,9	4,6	-	-
reduced (25 %)	1,16	1,16	2,67	-	-	-	-	2,9	-	-
reduced (16 %)	0,73	0,73	1,45	-	-	-	-	1,9	-	-
reduced (10 %)	0,46	0,46	1,16	-	-	-	-	-	-	-
reduced (6,3 %)	0,29	-	0,73	-	-	-	-	-	-	-
reduced (4 %)	-	-	0,46	-	-	-	-	-	-	-
reduced (2,5 %)	0,12	0,12	-	-	-	-	-	-	-	-
stroke (inch)	0,63					0,63				

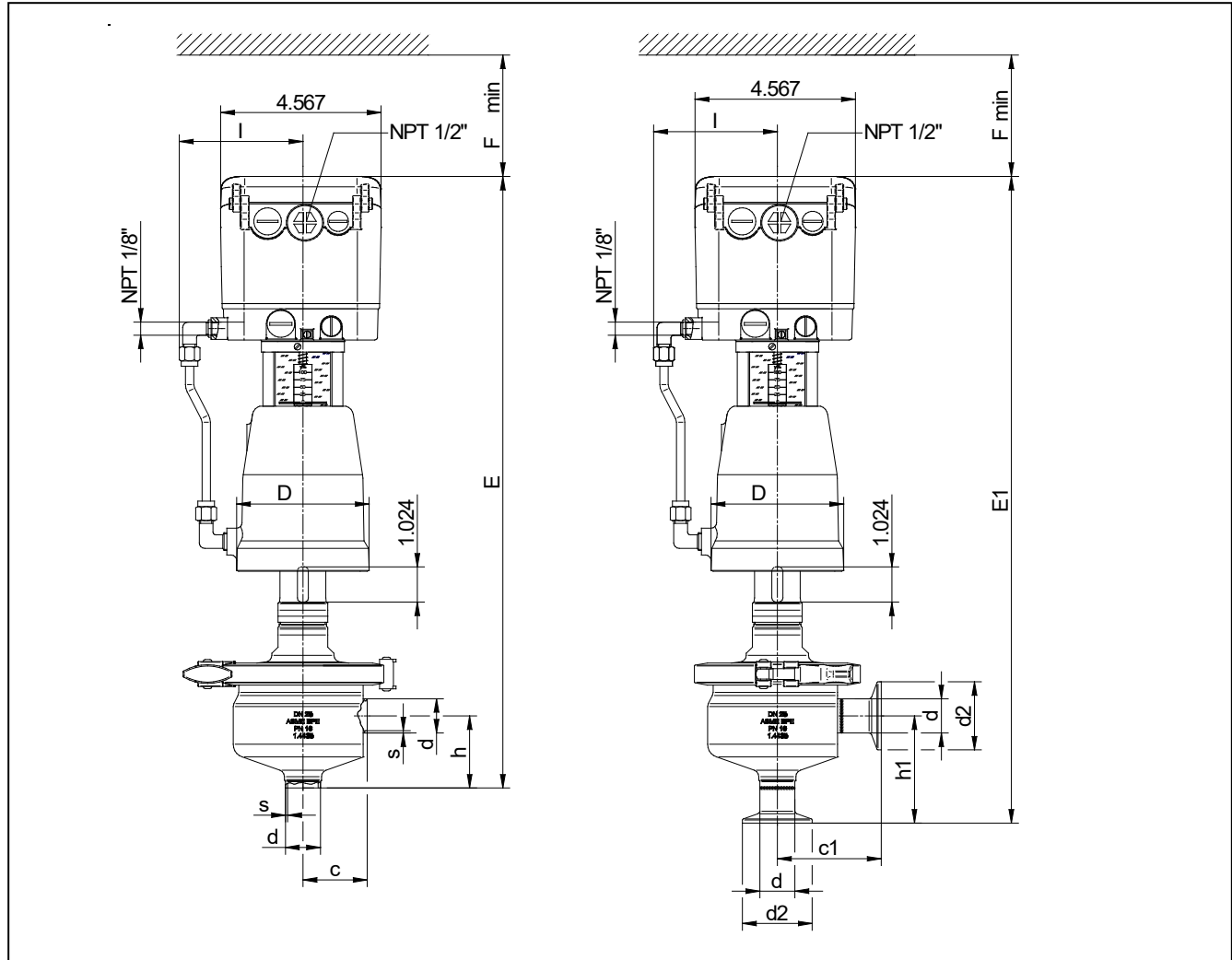
Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights

Control valve with piston actuator NC and positioner Type 8049



Size	Actuator	D	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
			s	d	c	h	d	d2	c1	h1
1/2"	3"	3.78	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	3"	3.78	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	3"	3.78	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1"	5"	5.75	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	3"	3.78	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
1 1/2"	5"	5.75	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	3"	3.78	0.06	2	2.01	2.32	2	2.52	3.5	3.5
2"	5"	5.75	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	I	E	E1	F	Weight [lbs]
1/2"	3"	3.54	17.97	18.92	3.54	15.4
3/4"	3"	3.54	17.78	18.92	3.54	15.4
1"	3"	3.54	17.89	18.92	3.54	15.7
1"	5"	4.13	18.68	19.7	3.54	21.6
1 1/2"	3"	3.54	18.09	19.86	3.94	16.8
1 1/2"	5"	4.13	18.88	20.65	3.94	22.7
2"	3"	3.54	18.48	19.7	4.72	17.6
2"	5"	4.13	19.27	20.49	4.72	23.6

Dimensions in inch

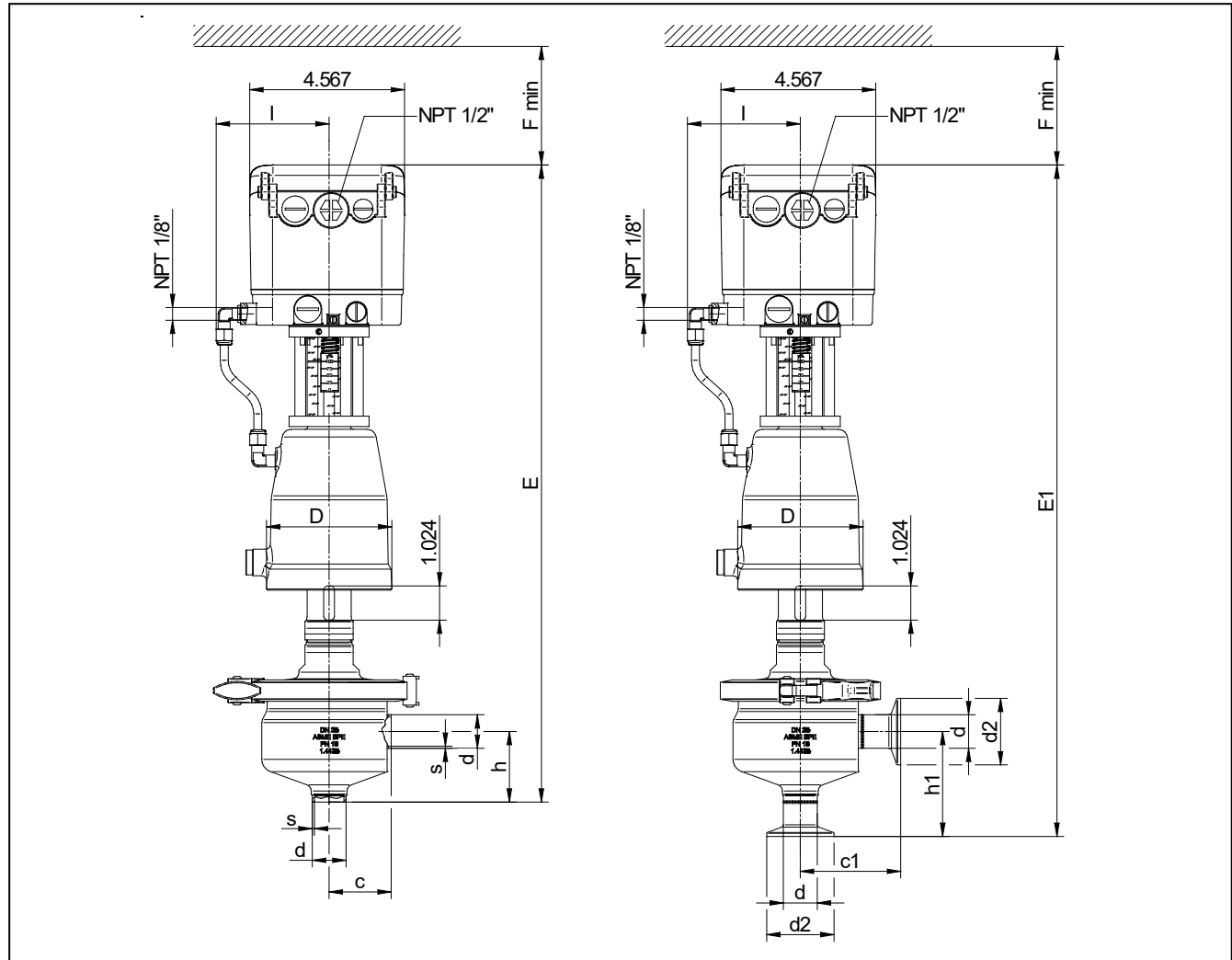
Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights

Control valve with piston actuator NO and positioner Type 8049



Size	Actuator	D	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
			s	d	c	h	d	d2	c1	h1
1/2"	3"	3.78	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	3"	3.78	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	3"	3.78	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1"	5"	5.75	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	3"	3.78	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
1 1/2"	5"	5.75	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	3"	3.78	0.06	2	2.01	2.32	2	2.52	3.5	3.5
2"	5"	5.75	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	I	E	E1	F	Weight [lbs]
1/2"	3"	3.54	19.11	18.92	3.54	15.4
3/4"	3"	3.54	18.92	18.92	3.54	15.4
1"	3"	3.54	19.04	18.92	3.54	15.7
1"	5"	4.13	19.82	19.7	3.54	21.6
1 1/2"	3"	3.54	19.23	19.86	3.94	16.8
1 1/2"	5"	4.13	20.02	20.65	3.94	22.7
2"	3"	3.54	19.63	19.7	4.72	17.6
2"	5"	4.13	20.41	20.49	4.72	23.6

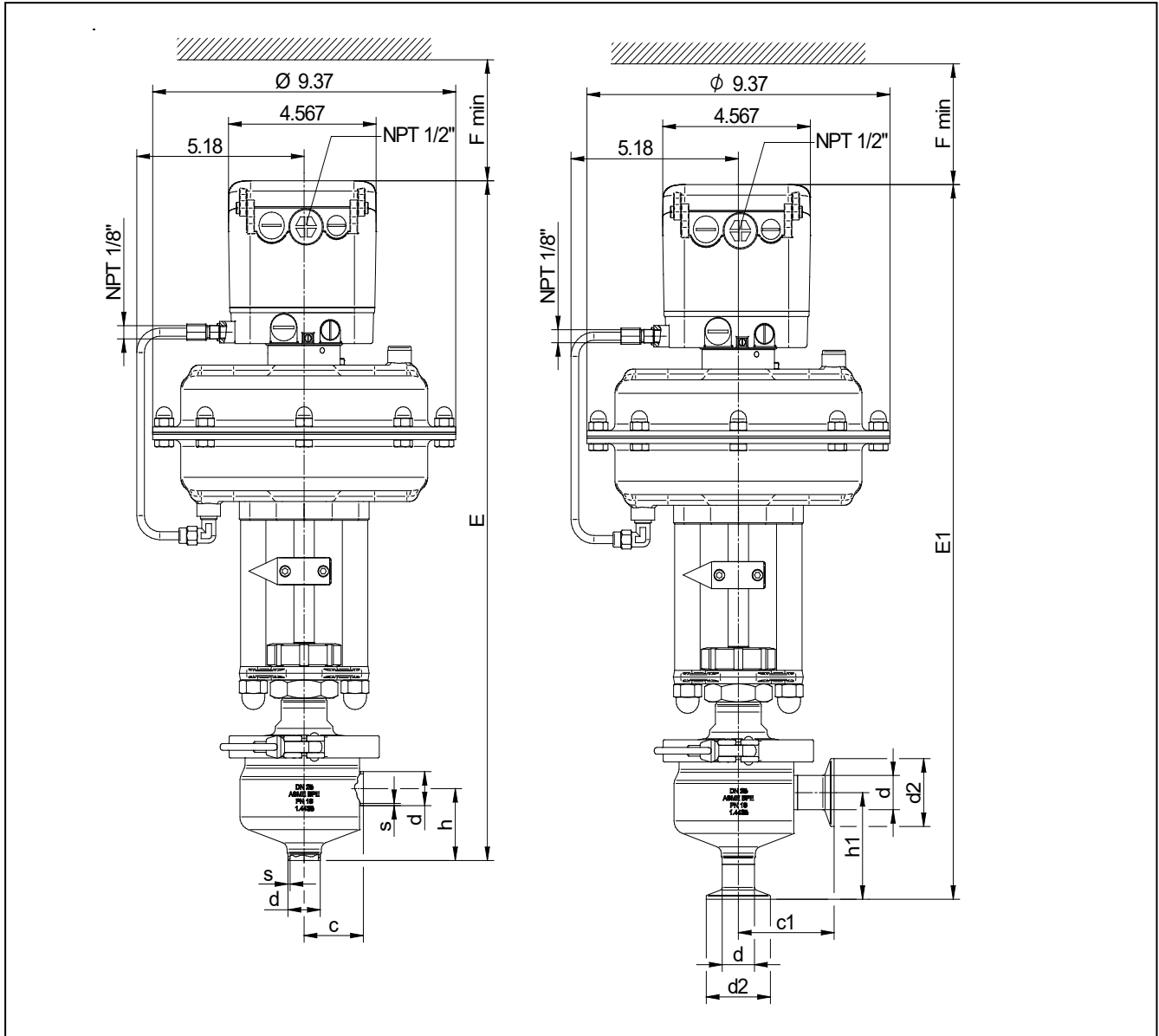
Dimensions in inch

Hygienic Right Angle Control Valve 6052

with 3A-conformance

Dimensions and weights

Control valve with diaphragm actuator NC and positioner Type 8049



Size	Actuator	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
		s	d	c	h	d	d2	c1	h1
1/2"	10"	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	10"	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	10"	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	10"	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	10"	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	E	E1	F	Weight [lbs]
1/2"	10"	20.08	20.98	3.54	34.2
3/4"	10"	19.88	20.98	3.54	34.2
1"	10"	20	20.98	3.54	34.6
1 1/2"	10"	20.2	21.93	3.94	36.4
2"	10"	20.59	21.77	4.72	36.8

Maße in mm

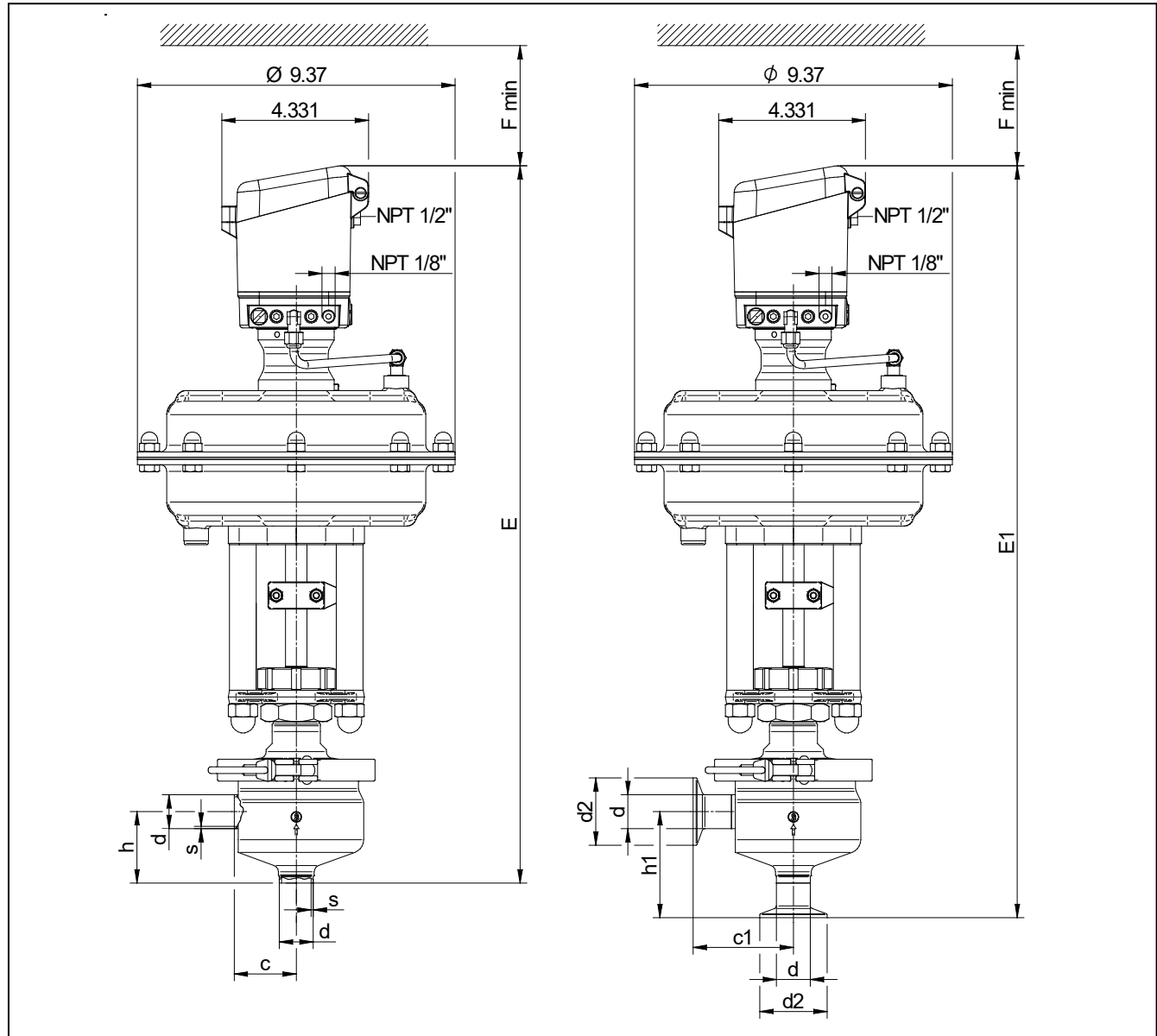
Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights

Control valve with diaphragm actuator NO and positioner Type 8049



Size	Actuator	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
		s	d	c	h	d	d2	c1	h1
1/2"	10"	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	10"	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	10"	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	10"	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	10"	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	E	E1	F	Weight [lbs]
1/2"	10"	20.08	22.17	3.54	34.2
3/4"	10"	19.88	22.17	3.54	34.2
1"	10"	20	22.17	3.54	34.6
1 1/2"	10"	20.2	23.11	3.94	36.4
2"	10"	20.59	22.95	4.72	36.8

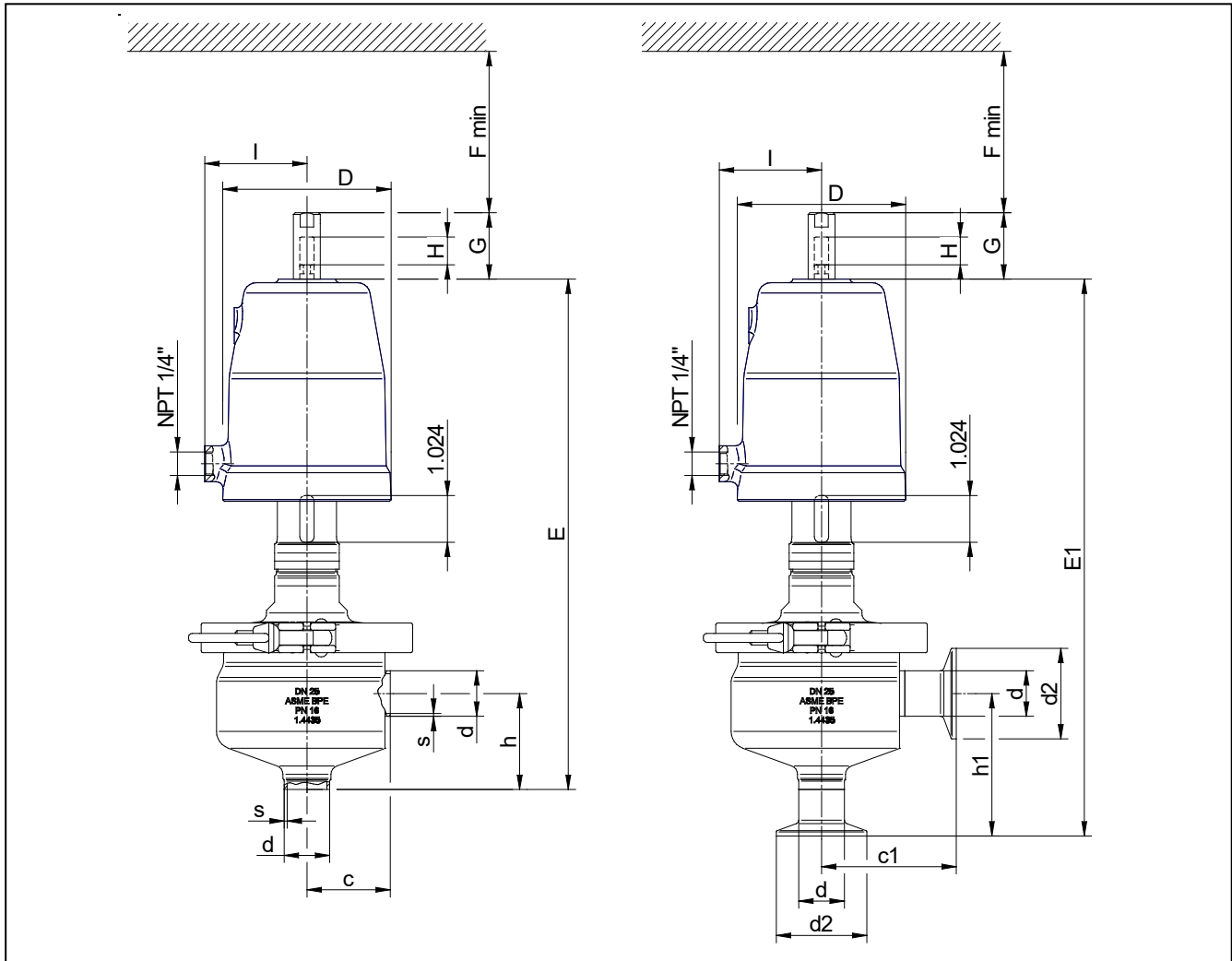
Dimensions in inch

Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights
Shut-off valve with piston actuator NC



Size	Actuator	D	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
			s	d	c	h	d	d2	c1	h1
1/2"	3"	3.78	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	3"	3.78	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	3"	3.78	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1"	5"	5.75	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	3"	3.78	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
1 1/2"	5"	5.75	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	3"	3.78	0.06	2	2.01	2.32	2	2.52	3.5	3.5
2"	5"	5.75	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	I	E	E1	G	H (Stroke)	F	Weight [lbs]
1/2"	3"	3.54	11.3	12.32	1.46	0.63	3.54	13.2
3/4"	3"	3.54	11.1	12.13	1.46	0.63	3.54	13.2
1"	3"	3.54	11.22	12.24	1.46	0.63	3.54	13.2
1"	5"	4.13	12.17	13.19	1.46	0.63	3.54	19.4
1 1/2"	3"	3.54	11.46	12.48	1.46	0.63	3.94	14.6
1 1/2"	5"	4.13	12.4	13.43	1.46	0.63	3.94	20.5
2"	3"	3.54	11.85	12.87	1.46	0.63	4.72	15.4
2"	5"	4.13	12.8	13.82	1.46	0.63	4.72	21.4

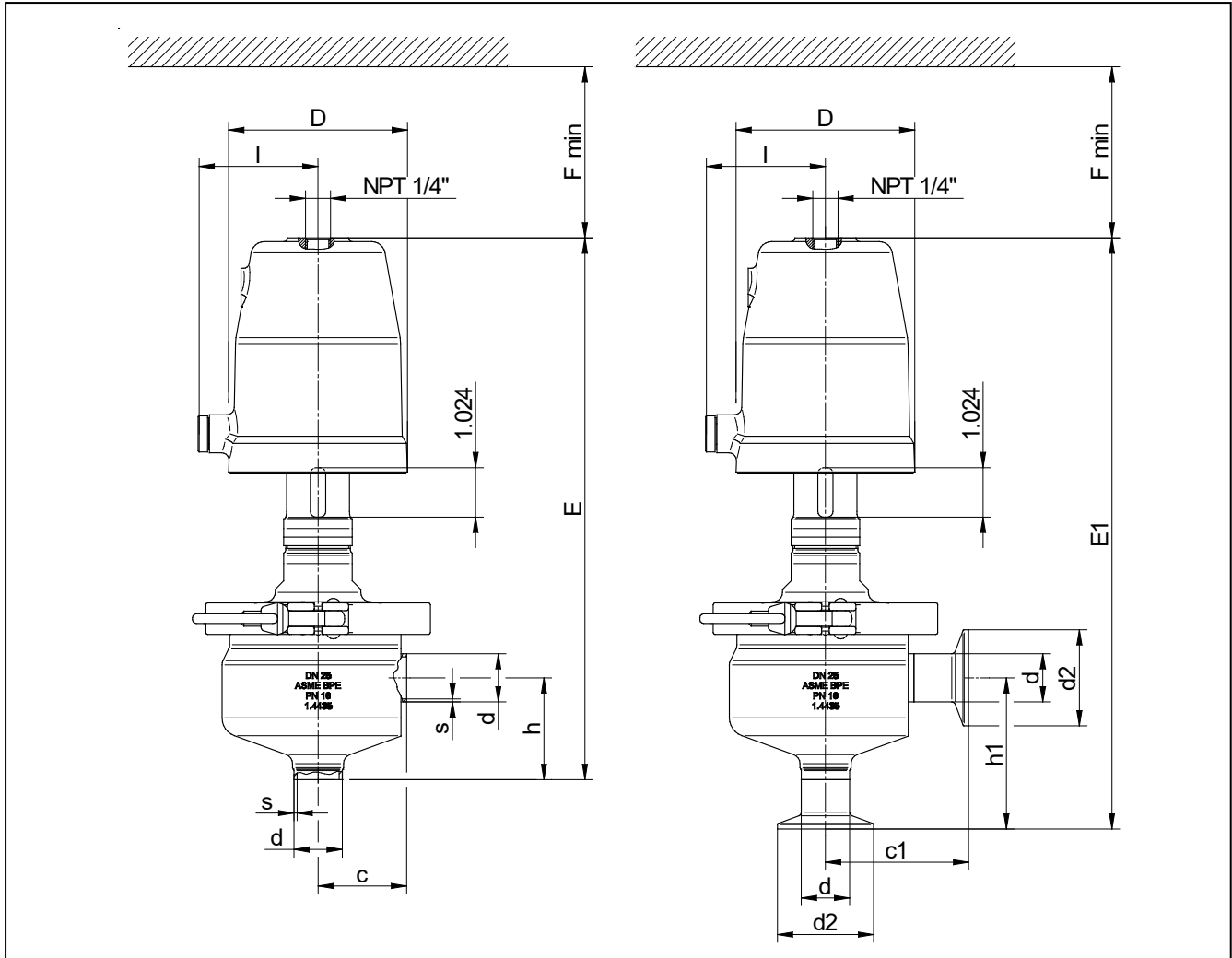
Dimensions in inch

Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights
Shut-off valve with piston actuator NO



Size	Actuator	D	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
			s	d	c	h	d	d2	c1	h1
1/2"	3"	3.78	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	3"	3.78	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	3"	3.78	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1"	5"	5.75	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	3"	3.78	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
1 1/2"	5"	5.75	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	3"	3.78	0.06	2	2.01	2.32	2	2.52	3.5	3.5
2"	5"	5.75	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	I	E	E1	G	H (Stroke)	F	Weight [lbs]
1/2"	3"	3.54	11.3	12.32	1.46	0.63	3.54	13.2
3/4"	3"	3.54	11.1	12.13	1.46	0.63	3.54	13.2
1"	3"	3.54	11.22	12.24	1.46	0.63	3.54	13.2
1"	5"	4.13	12.17	13.19	1.46	0.63	3.54	19.4
1 1/2"	3"	3.54	11.46	12.48	1.46	0.63	3.94	14.6
1 1/2"	5"	4.13	12.4	13.43	1.46	0.63	3.94	20.5
2"	3"	3.54	11.85	12.87	1.46	0.63	4.72	15.4
2"	5"	4.13	12.8	13.82	1.46	0.63	4.72	21.4

Dimensions in inch

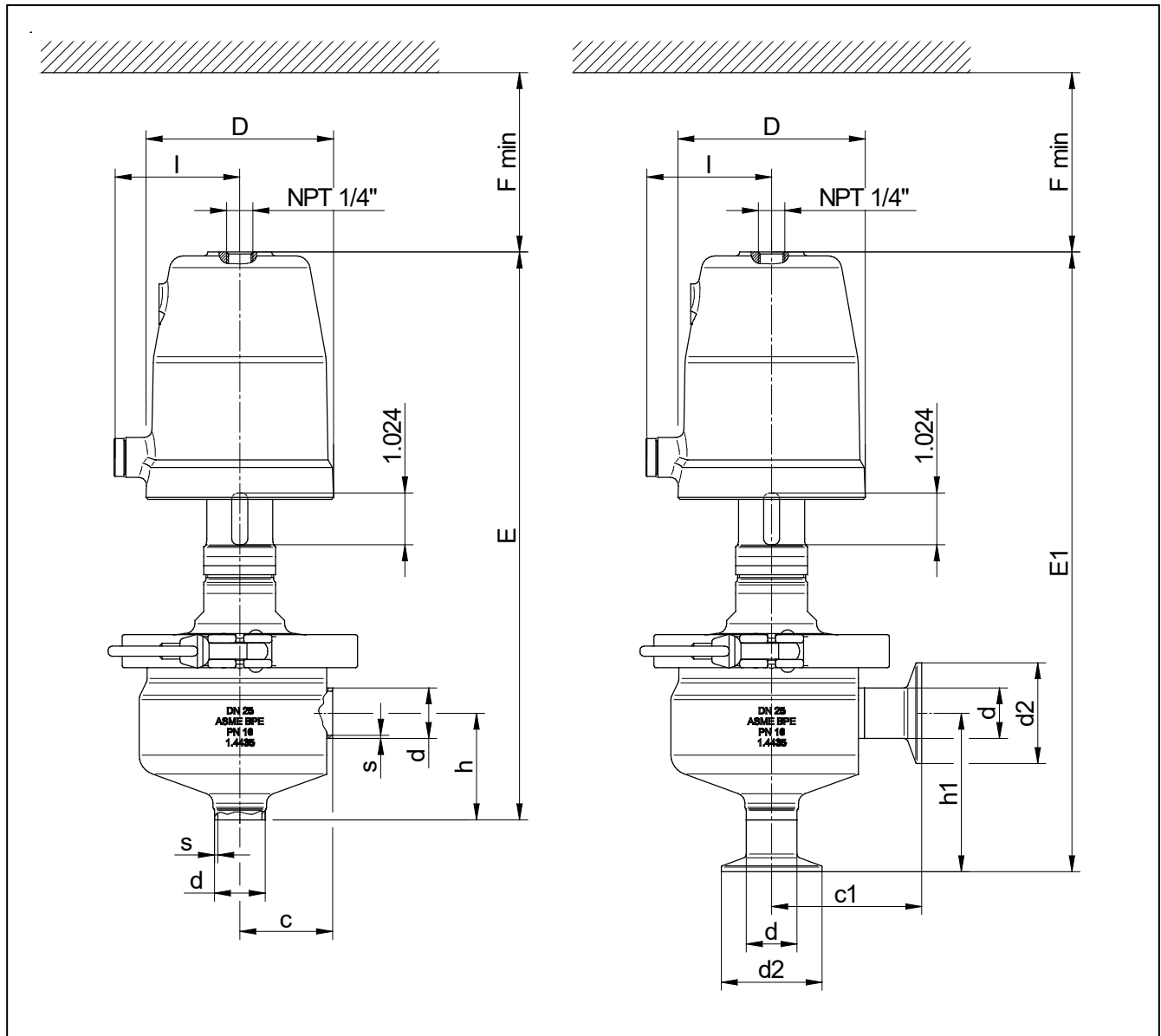
Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights

Shut-off valve with diaphragm actuator NC



Size	Actuator	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
		s	d	c	h	d	d2	c1	h1
1/2"	10"	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	10"	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	10"	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	10"	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	10"	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	E	E1	F	Weight [lbs]
1/2"	10"	15.43	15.79	3.54	34.2
3/4"	10"	15.24	15.79	3.54	34.2
1"	10"	15.35	15.79	3.54	34.6
1 1/2"	10"	15.55	16.73	3.94	36.4
2"	10"	15.94	16.54	4.72	36.8

Dimensions in inch

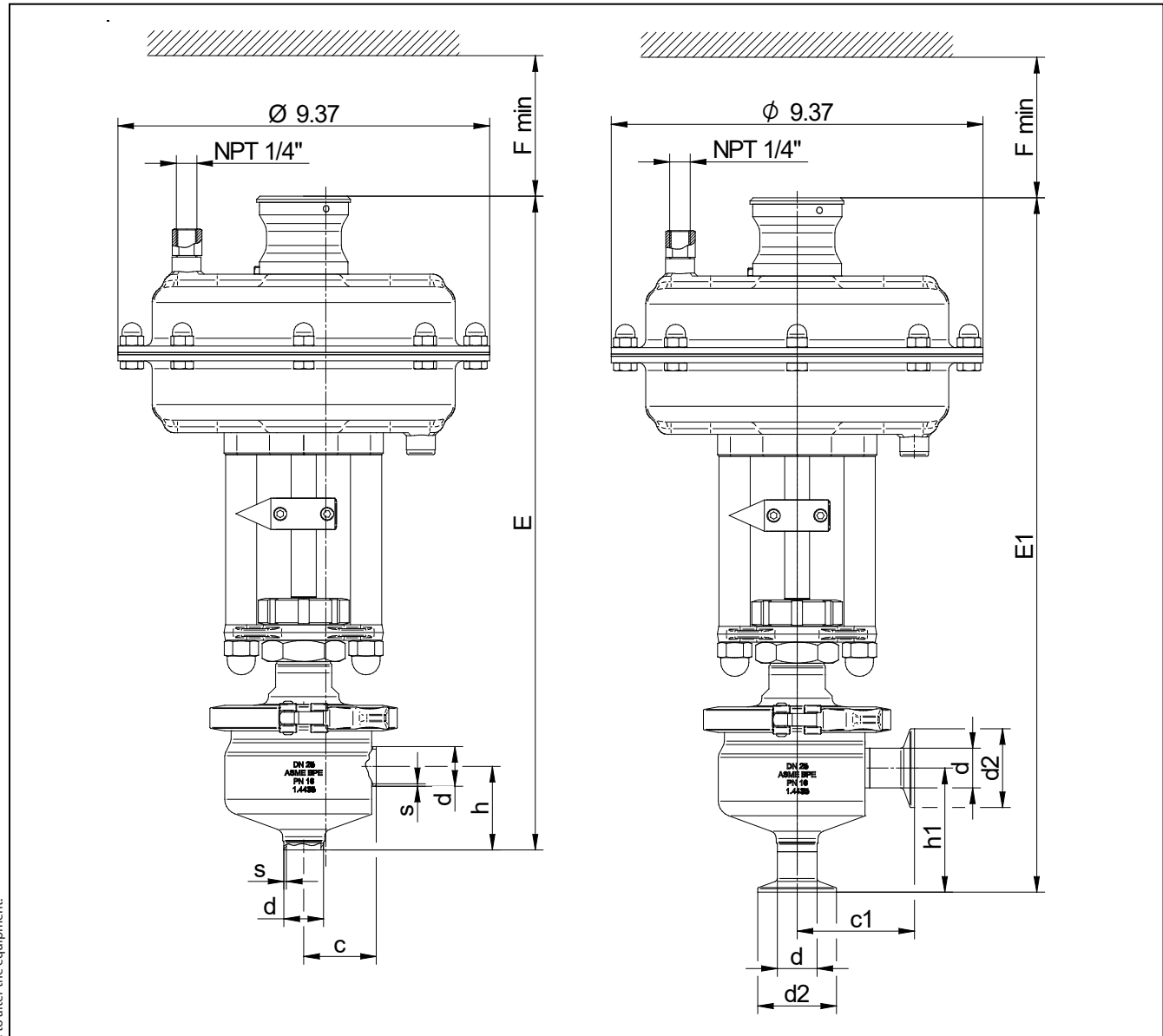
Hygienic Right Angle Control Valve 6052



with 3A-conformance

Dimensions and weights

Shut-off valve with diaphragm actuator NO



Size	Actuator	Welding ends acc. ASME BPE				Tri-Clamp acc. ASME BPE			
		s	d	c	h	d	d2	c1	h1
1/2"	10"	0.06	0.5	1.83	2.42	0.5	0.98	2.81	3.37
3/4"	10"	0.06	0.75	1.83	2.11	0.75	0.98	2.81	3.27
1"	10"	0.06	1	1.83	2.11	1	1.99	2.96	3.13
1 1/2"	10"	0.06	1.5	1.95	2.15	1.5	1.99	3.43	3.9
2"	10"	0.06	2	2.01	2.32	2	2.52	3.5	3.5

Size	Actuator	E	E1	F	Weight [lbs]
1/2"	10"	20.08	22.17	3.54	34.2
3/4"	10"	19.88	22.17	3.54	34.2
1"	10"	20	22.17	3.54	34.6
1 1/2"	10"	20.2	23.11	3.94	36.4
2"	10"	20.59	22.95	4.72	36.8

Dimensions in inch

Text and pictures are not binding. We reserve the right to alter the equipment.