

# Angle Seat Valve

## 1/4" up to 3"

## 7010

## up to 428°F



**Pneumatically operated angle seat valve for the control of neutral and aggressive gases, liquids and steam.**

- Compact design
- For temperatures from -22°F up to +428°F
- Working pressure up to 580 psi
- Versatile actuators
- ANSI Class VI shutoff
- Various end connections, including NPT, ANSI-Flanges, Tri-clamp, tube ends, etc.

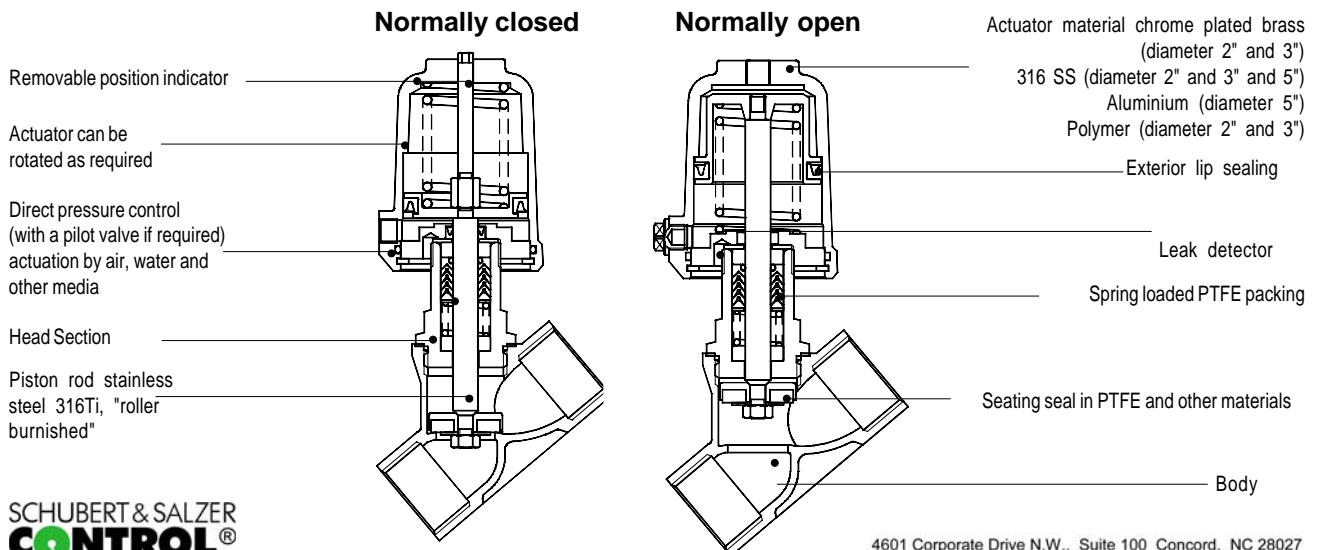
### Technical Information

	Body material		
	Brass	Bronze	SST 316L
Nominal size	2 1/2" and 3"	1/2" - 2"	1/4" - 3"
Connections:			
NPT thread, Tri clamp	2 1/2" - 3"	1/2" - 2"	1/4" - 3"
Welding ends (ISO/SAE), Tube ends ANSI 150, ANSI 300			
Nominal pressure	235 psi	235 psi	580 psi
Max. fluid temperature:			
with metal bonnet	-22°F up to 338°F	-22°F up to 338°F up to +392°F	-22°F up to 338°F up to +392°F
with plastic bonnet	-22°F up to 275°F	-22°F up to 275°F	-22°F up to 275°F
diaphragm act., stainless steel			-22°F up to 392°F
Ambient temperature	-22°F up to +140°F		
Viscosity of the fluid	maximum 600 mm <sup>2</sup> /s (600cSt, 80°E)		
Vacuum	maximum 0.0295 mercury (Hg)		
Working pressure for inverted packing	maximum 175 psi		
Working pressure for Tri-Clamp connection	maximum 235 psi		



### Options

- limit switches
  - inductive proximity switches
  - electrical limit switches
- solenoid valves
- manual override
- O<sub>2</sub>-cleaned version
- PTFE-free version (PEEK)
- ASi-Bus



# Angle Seat Valve 7010, standard design

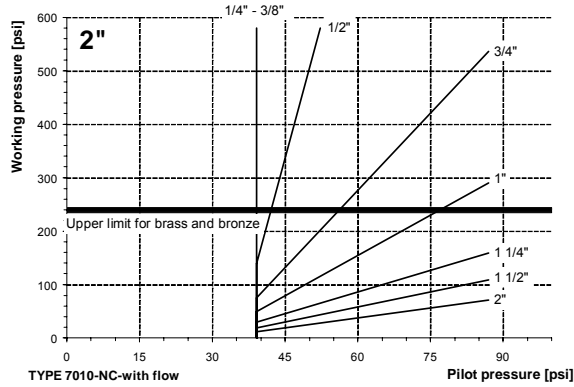
## Metal and stainless steel actuator



Spring closes NC (closing with flow)

Normally closed angle seat valves, closing with the flow. Operates better with gases, with liquids water hammer is possible.

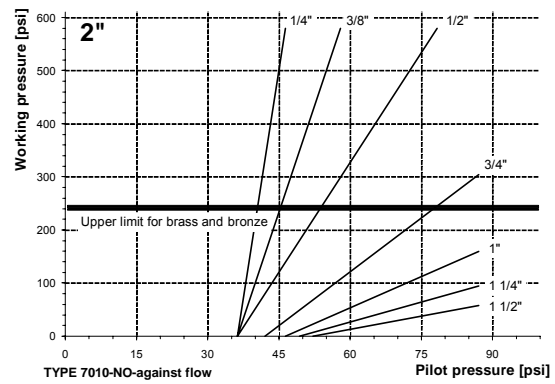
### Actuator diameter 2"



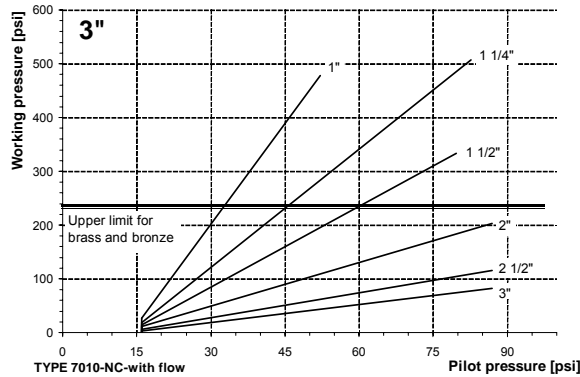
Spring opens NO (closing against flow)

Normally open angle seat valves, closing against the flow.

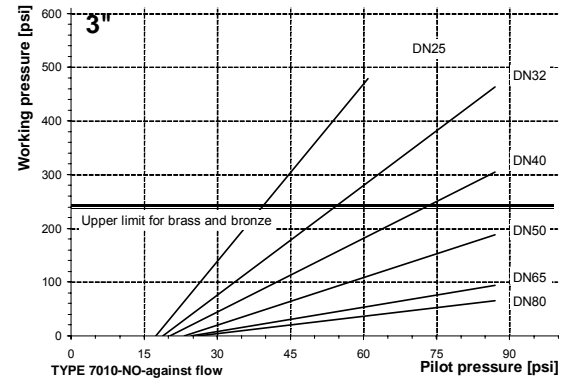
### Actuator diameter 2"



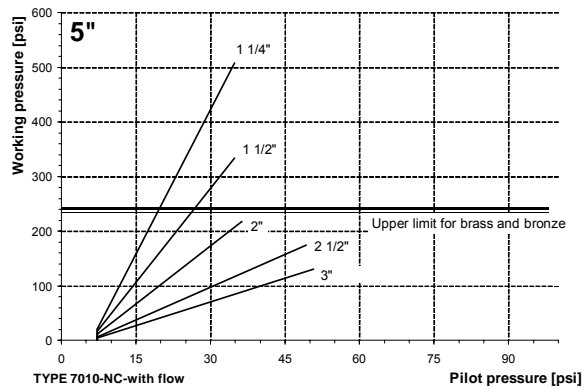
### Actuator diameter 3"



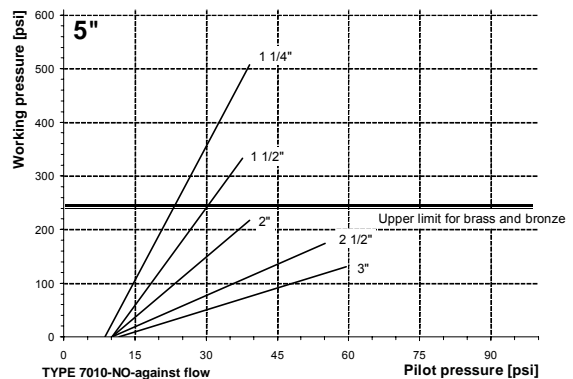
### Actuator diameter 3"



### Actuator diameter 5"



### Actuator diameter 5"



# Angle Seat Valve 7010, standard design



Normally closed angle seat valves, closing against the flow (operating with fluids).

Metall and stainless steel actuator

Nominal size	Working pressure (i.e. Differential)		Pilot pressure psi	Piston Ø inch	Springs
	stainless steel	bronze			
1/4" (8)	580	-	50 - 145	2"	1
3/8" (10)	580	-	50 - 145	2"	1
1/2" (15)	320	230	50 - 145	2"	1
3/4" (20)	100	100	50 - 145	2"	1
3/4" (20)	190	190	65 - 145	2"	2
3/4" (20)	275	230	85 - 145	2"	3
1" (25)	35	35	50 - 145	2"	1
1" (25)	85	85	65 - 145	2"	2
1" (25)	130	130	85 - 145	2"	3
1" (25)	320	230	50 - 145	3"	1
1 1/4" (32)	15	15	50 - 145	2"	1
1 1/4" (32)	45	45	65 - 145	2"	2
1 1/4" (32)	75	75	85 - 145	2"	3
1 1/4" (32)	175	175	50 - 145	3"	1
1 1/4" (32)	245	230	65 - 145	3"	2
1 1/4" (32)	320	230	85 - 145	3"	3
1 1/4" (32)	160	160	20 - 145	5"	1
1 1/4" (32)	335	230	30 - 145	5"	2

Nominal size	Working pressure (i.e. Differential)		Pilot pressure psi	Piston Ø inch	Springs
	stainless steel	bronze brass			
1 1/2" (40)	30	30	65 - 145	2"	2
1 1/2" (40)	50	50	80 - 145	2"	3
1 1/2" (40)	100	100	50 - 145	3"	1
1 1/2" (40)	145	145	65 - 145	3"	2
1 1/2" (40)	190	190	80 - 145	3"	3
1 1/2" (40)	100	100	20 - 145	5"	1
1 1/2" (40)	220	220	30 - 145	5"	2
1 1/2" (40)	305	230	45 - 145	5"	3
2" (50)	60	60	50 - 145	3"	1
2" (50)	85	85	65 - 145	3"	2
2" (50)	110	110	80 - 145	3"	3
2" (50)	125	125	30 - 145	5"	2
2" (50)	190	190	45 - 145	5"	3
2 1/2" (65)	60	55 *	80 - 145	3"	3
2 1/2" (65)	75	65 *	30 - 145	5"	2
2 1/2" (65)	100	90 *	45 - 145	5"	3
3" (80)	**	65 *	45 - 145	5"	3

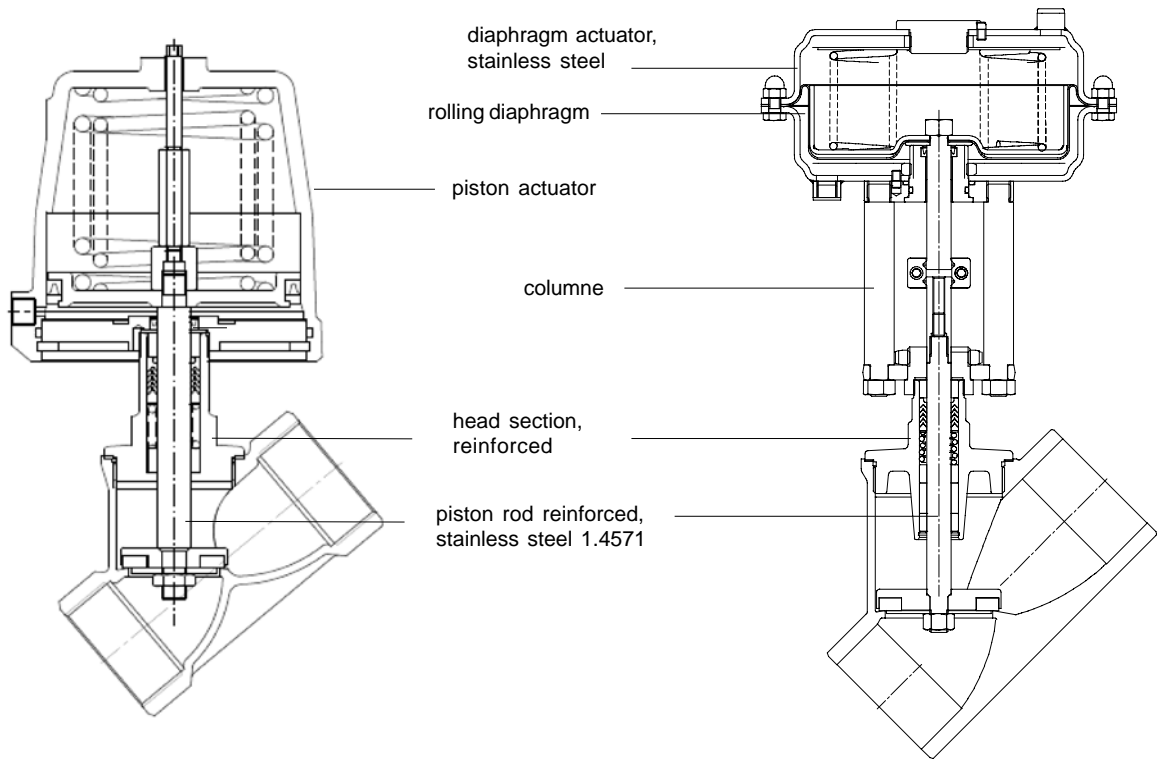
\* brass body

\*\* reinforced design

Standard

# Angle Seat Valve 7010, reinforced design

stainless steel 2" up to 3" 235 psi



Normally closed angle seat valves, closing against the flow (operating with fluids).

Nominal size	max. Working pressure (differential pressure) psi stainless steel	Pilot pressure (psi)	Diaphragm area A in <sup>2</sup>	Springs number
2"	175	45 - 145	20	3
2"	275	40 - 90	40	8
2"	365	55 - 90	40	12
2 1/2"	85	45 - 145	20	3
2 1/2"	145	40 - 90	40	8
2 1/2"	205	55 - 90	40	12
3"	60	45 - 145	20	3
3"	100	40 - 90	40	8
3"	145	55 - 90	40	12
Standard				

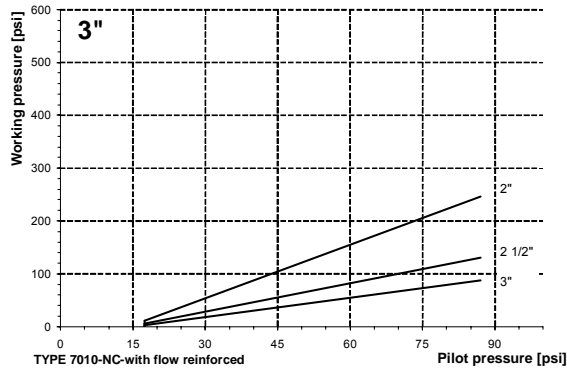
# Angle Seat Valve 7010, reinforced design



Spring closes NC (closing with flow)

Normally closed angle seat valves, closing with the flow. Operates better with gases, with liquids water hammer is possible.

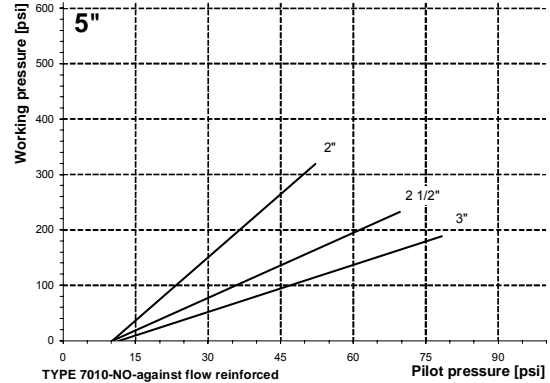
**Piston actuator diameter 2"**



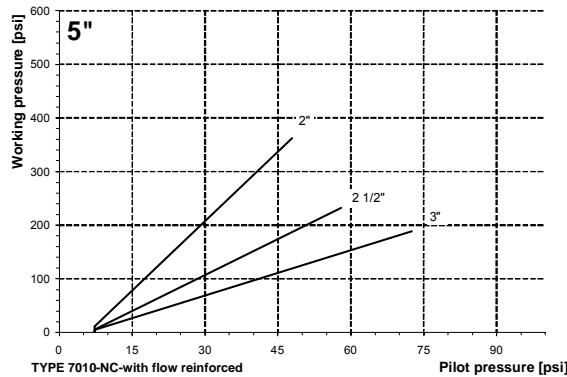
Spring opens NO (closing against flow)

Normally open angle seat valves, closing against the flow.

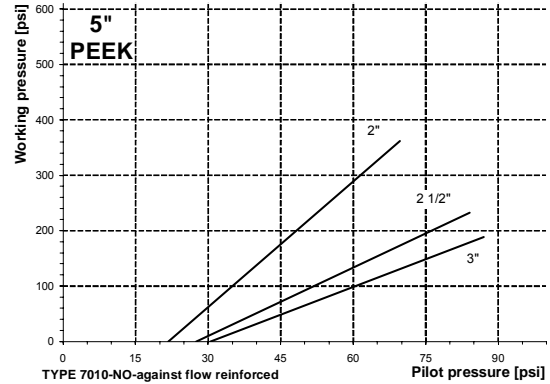
**Piston actuator diameter 3"**



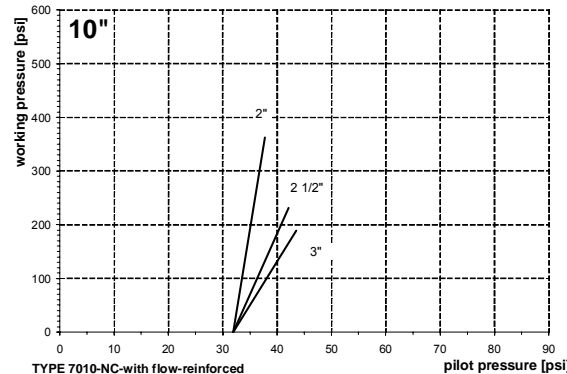
**Piston actuator diameter 3"**



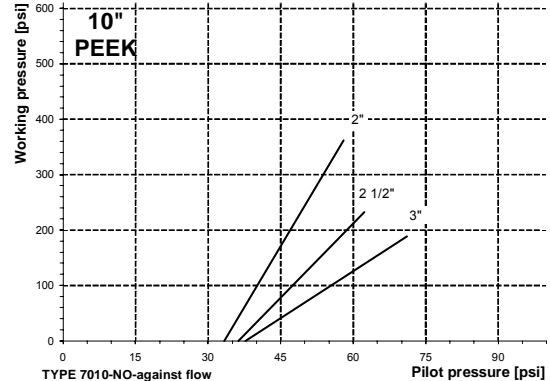
**Piston actuator diameter 3"**  
**PEEK seating seal**



**Diaphragm actuator diameter A40in<sup>2</sup>**



**Diaphragm actuator diameter A40in<sup>2</sup>**  
**PEEK seating seal**

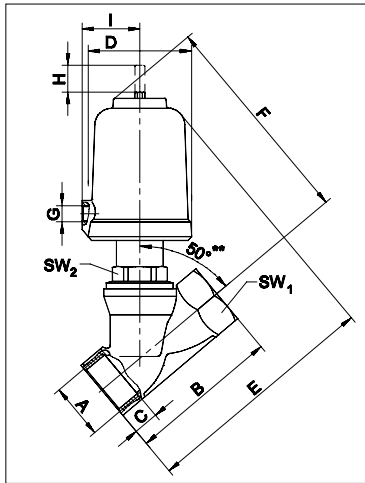


higher pressures on request

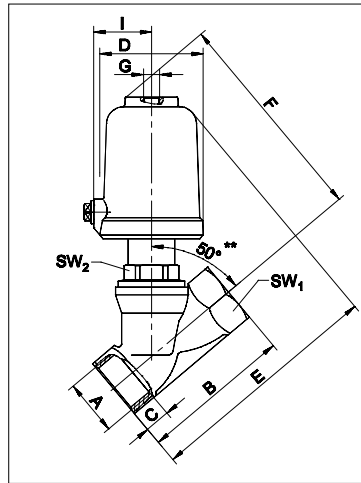


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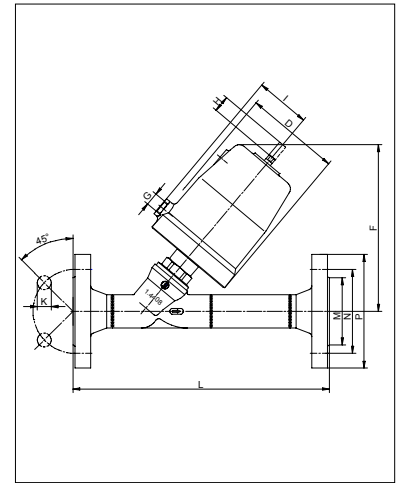
## Dimensions and Weights



Normal closed



Normal open



7031

DN	Actuator diameter	A Rp/NPT	B		C	D	E		F	G	H (Stroke)	I	SW1		SW2	Cv-Values		Weight (lbs)	Weight Model 7012
			Bronze SST	Brass			Bronze SST	Brass					Bronze SST	Brass		Bronze SST	Brass		
8	2"	1/4"	2.35	-	0.45	2.45	5.1	-	4.85	G1/8"	0.33	1.35	0.8	-	1.2	1.1	-	2.2	-
10	2"	3/8"	2.35	-	0.45	2.45	5.1	-	4.85	G1/8"	0.35	1.35	0.9	-	1.2	1.9	-	2.31	-
15	2"	1/2"	2.55	-	0.6	2.45	5.3	-	4.7	G1/8"	0.28	1.35	1	-	1.2	4.1	-	2.42	2.2
20	2"	3/4"	2.95	-	0.65	2.45	5.3	-	4.9	G1/8"	0.47	1.35	1.2	-	1.2	9.3	-	2.64	2.4
25	2"	1"	3.55	-	0.75	2.45	5.7	-	5.1	G1/8"	0.63	1.35	1.55	-	1.2	17.4	-	3.08	2.9
25	3"	1"	3.55	-	0.75	3.8	7.3	-	6.7	G1/4"	0.63	2.15	1.55	-	1.2	18.6	-	6.6	3.7
32	2"	1 1/4"	4.35	-	0.85	2.45	6.3	-	5.7	G1/8"	0.63	1.35	1.9	-	1.2	24.4	-	3.96	3.7
32	3"	1 1/4"	4.35	-	0.85	3.8	7.85	-	7.5	G1/4"	0.79	2.15	1.9	-	1.2	27.8	-	7.26	4.6
32	5"	1 1/4"	4.35	-	0.85	5.75	9.05	-	8.45	G1/4"	0.79	3.15	1.9	-	1.2	27.8	-	12.1	-
40	2"	1 1/2"	4.7	-	0.85	2.45	6.5	-	5.9	G1/8"	0.63	1.35	2.15	-	1.2	34.8	-	4.62	4.4
40	3"	1 1/2"	4.7	-	0.85	3.8	8.05	-	7.7	G1/4"	0.91	2.15	2.15	-	1.2	40.6	-	7.92	5.3
40	5"	1 1/2"	4.7	-	0.85	5.75	9.25	-	8.65	G1/4"	0.91	3.15	2.15	-	1.2	40.6	-	12.76	-
50	2"	2"	5.9	-	1	2.45	7.3	-	6.3	G1/8"	0.63	1.35	2.7	-	1.25	46.4	-	5.94	5.7
50	3"	2"	5.9	-	1	3.8	8.85	-	7.85	G1/4"	1.14	2.15	2.7	-	1.25	63.8	-	9.24	6.6
50	5"	2"	5.9	-	1	5.75	9.85	-	8.85	G1/4"	1.14	3.15	2.7	-	1.25	63.8	-	14.08	-
65	3"	2 1/2"	7.1	7.1	1.2	3.8	10.25	10.25	8.45	G1/4"	1.14	2.15	3.35	3.35	1.6	92.8	107.9	13.64	11
65	5"	2 1/2"	7.1	7.1	1.2	5.75	11.2	11.2	9.65	G1/4"	1.14	3.15	3.35	3.35	1.6	92.8	107.9	18.48	-
80	3"	3"	-	8.25	1.3	3.8	-	11	8.85	G1/4"	1.14	2.15	-	3.95	1.6	-	133.4	18.26	-
80	5"	3"	-	8.25	1.3	5.75	-	12	9.85	G1/4"	1.14	3.15	-	3.95	1.6	-	133.4	23.1	-

Dimension in inch

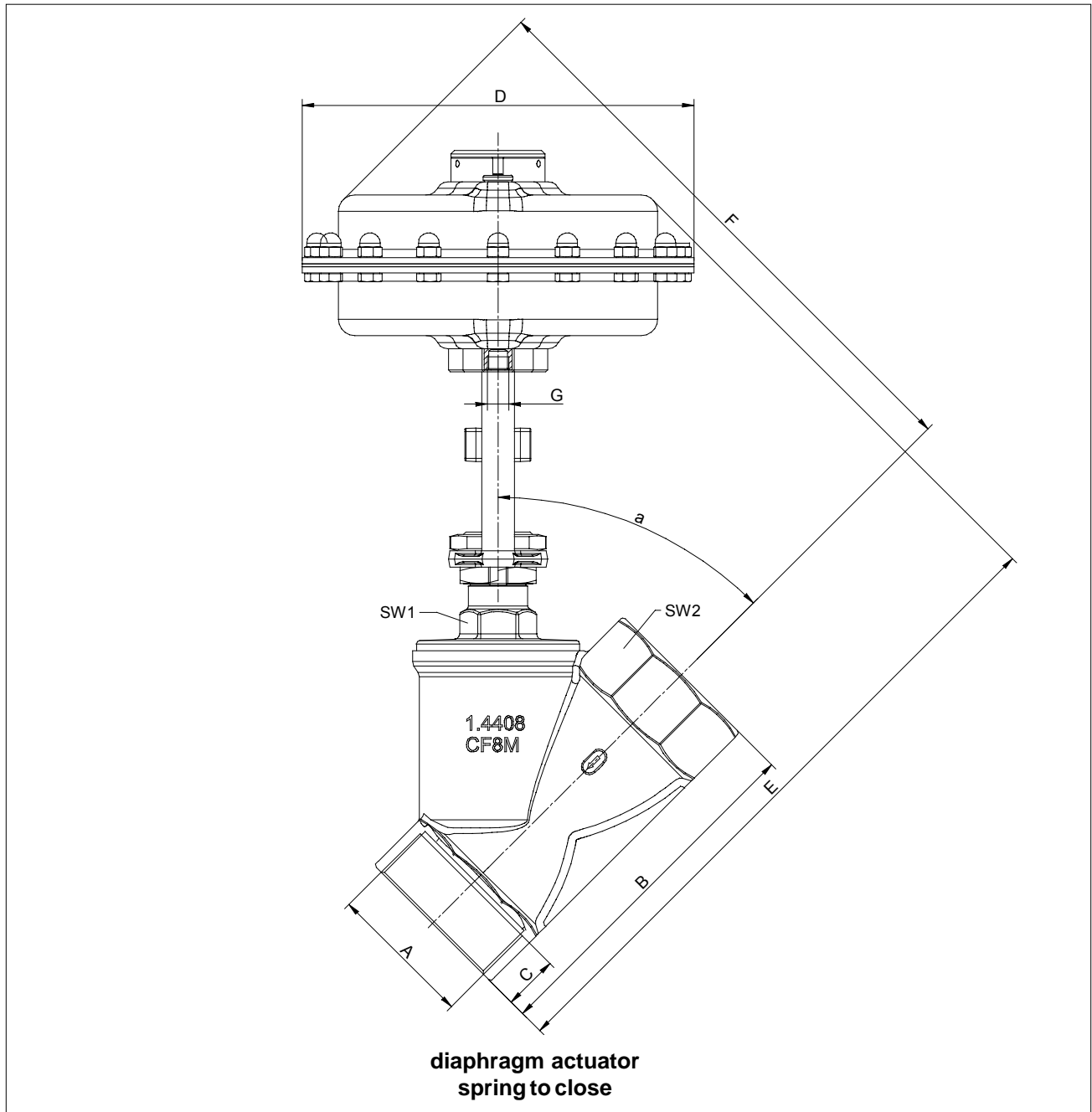
### Differing dimensions from type 7031

DN	Actuator Ø	M	N	P	F	K	L *	N Amount Drillings	Weight (lbs)
1/2"	2"	1.75	2.55	3.75	5.45	0.55	9.05	4	6.2
3/4"	2"	2.3	2.95	4.15	5.65	0.55	10.25	4	7.7
3/4"	3"	2.3	2.95	4.15	7.15	0.55	10.25	4	11.2
1"	3"	2.7	3.35	4.55	7.3	0.55	10.25	4	12.8
1"	5"	2.7	3.35	4.55	8.45	0.55	10.25	4	17.6
1 1/4"	3"	3.05	3.95	5.5	7.9	0.7	11.8	4	16.1
1 1/4"	5"	3.05	3.95	5.5	9.1	0.7	11.8	4	20.9
1 1/2"	3"	3.45	4.7	5.9	8.1	0.7	11.8	4	17.6
1 1/2"	5"	3.45	4.7	5.9	9.25	0.7	11.8	4	22.2
2"	3"	4	5.9	6.5	8.4	0.7	13.8	4	22.4
2"	5"	4	5.9	6.5	9.55	0.7	13.8	4	27.7

Dimension in inch

# Angle Seat Valve 7010, reinforced design

## Dimensions and Weights



DN	Actuator (in <sup>2</sup> )	A Rp/NPT	B*	C	D	E	F	G	Stroke (inch)	SW1	SW2	α	cv-value	Weight (lbs)
2"	40	2"	5.91	1.01	9.37	13.31	12.72	G1/4"	0.98	2.68	1.26	50°	63.8	32
2 1/2"	40	2 1/2"	7.09	1.19	9.37	14.41	13.62	G1/4"	0.98	3.35	1.61	45°	92.8	34.5
3"	40	3"	8.27	1.31	9.37	16.02	13.78	G1/4"	0.98	3.94	1.61	45°	-	39

Dimension in inch

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