

# Angle Seat Valve 7010

DN 8 up to DN 80 PN 16 - PN 40



**Pneumatically operated angle seat valve for the control of neutral, slightly aggressive and highly aggressive media.**

- Compact design
- Unaffected by lightly contaminated media
- For temperatures from -30°C up to +200°C
- Working pressure up to 40 bar
- Versatile actuator options



## Technical Information

	Body material		
	Brass CC754S	Bronze CC491K	Stainl. steel 1.4408
Nominal size	DN 65 and DN 80	DN 15 to DN 50	DN 8 to DN 80
Connections:			
Pipe thread acc. ISO 228-1	2 1/2" and 3"	1/2" - 2"	1/4" - 3"
NPT thread	2 1/2" and 3"	1/2" - 2"	1/4" - 3"
welding ends (DIN/ISO)			1/2" - 2 1/2"
Nominal pressure	PN 16	PN 16	PN 40
Max. fluid temperature*:			
with metal bonnet	-30°C up to 170°C	-30°C up to 170°C	-30°C up to 170°C
*optional		up to +200°C*	up to +200°C*
with plastic bonnet	-30°C up to 135°C	-30°C up to 135°C	-30°C up to 135°C
diaphragm act., stainless steel			-30°C up to 200°C
Ambient temperature*	-15°C up to +60°C		
Vacuum	maximum 0,001bar abs		
Working pressure	See tables and diagrams, limitation for dangerous gases acc. Pressure equipment directive 2014/68/EU (category I); PS x DN < 1000		
Working pressure for packing underneath	maximum 12 bar		
Working pressure for Tri-Clamp connection	maximum 16 bar		
Leakage acc. EN 12266-1	leakage class A		

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

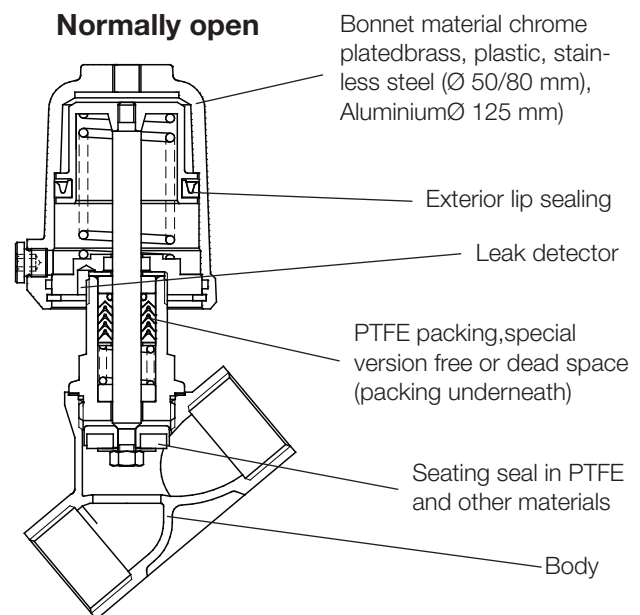
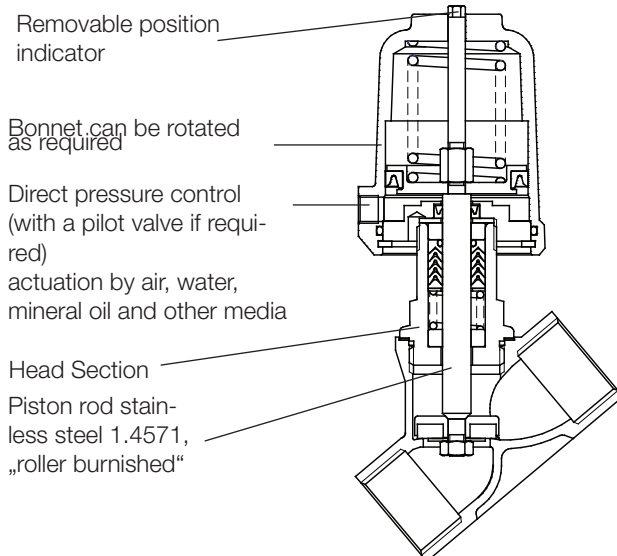


## Options

- e. g.:
- limit switches
    - inductive proximity switch
    - electrical switches
  - pilot valves
  - AS-I control head
  - manual override
  - oil and grease free version
  - PTFE free version

### Normally closed

### Normally open



# Angle Seat Valve 7010

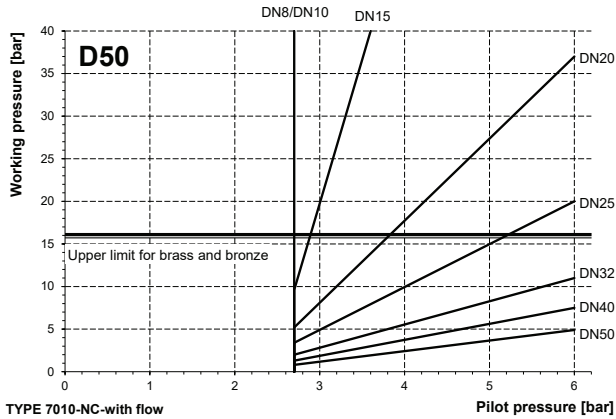
## standard design



### 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.

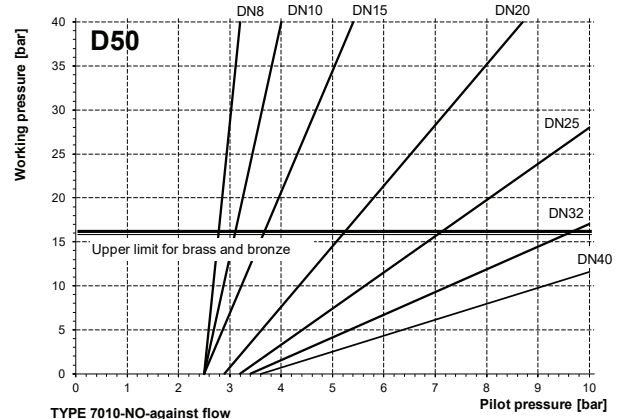
#### Actuator diameter 50 mm



### Spring opens NO (closing against flow)

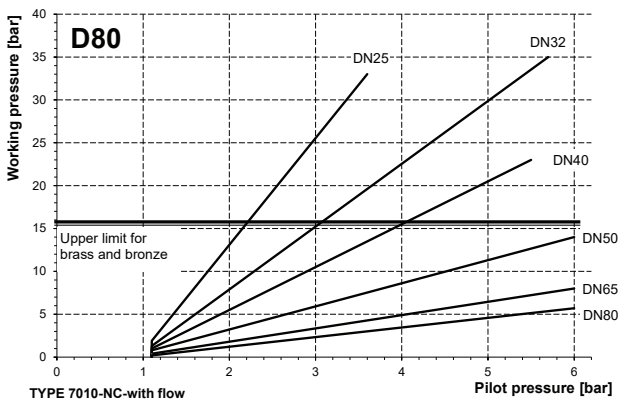
Normally open angle seat valves, closing against the flow.

#### Actuator diameter 50 mm

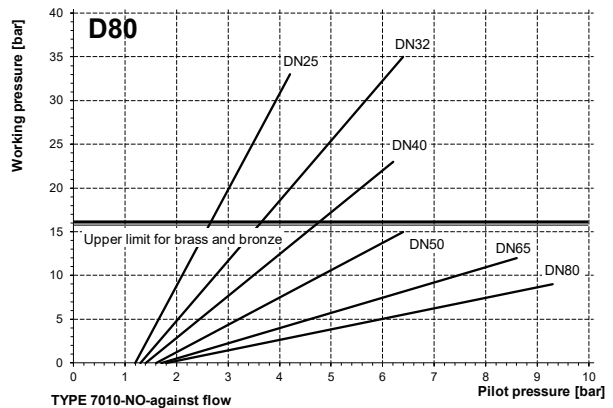


maximum pilot pressure 1 bar more than necessary pilot pressure for working pressure

#### Actuator diameter 80 mm

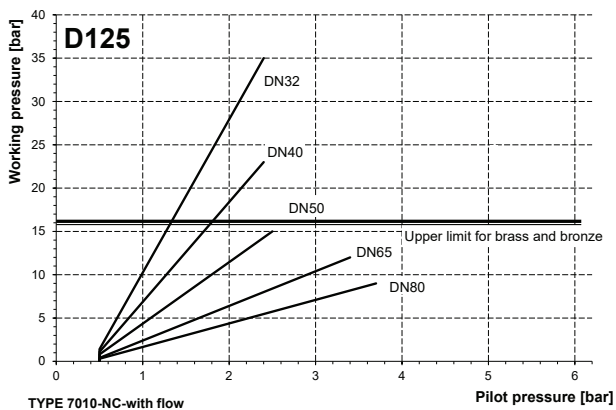


#### Actuator diameter 80 mm

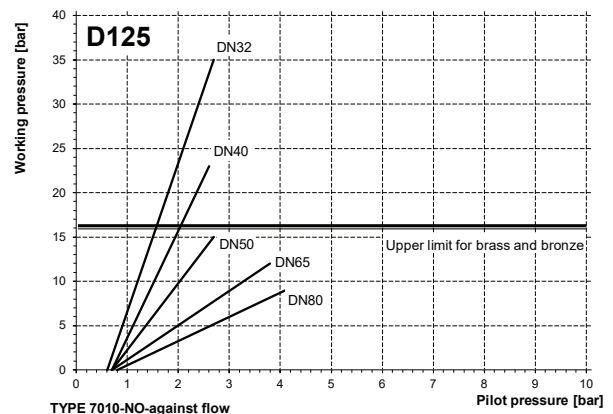


maximum pilot pressure 0,8 bar more than necessary pilot pressure for working pressure

#### Actuator diameter 125 mm



#### Actuator diameter 125 mm



maximum pilot pressure 0,5 bar more than necessary pilot pressure for working pressure

# Angle Seat Valve 7010

## standard design

### NC (closing against flow)

Nominal size	Working pressure (i.e. Differential) bar		Pilot pressure bar	Piston Ø mm	Springs
	stainless steel	bronze			
DN8	40	-	3,5 - 10	50	1
DN10	40	-	3,5 - 10	50	1
DN15	22	16	3,5 - 10	50	1
DN20	7	7	3,5 - 10	50	1
DN20	13	13	4,5 - 10	50	2
DN20	19	16	5,7 - 10	50	3
DN25	2,5	2,5	3,5 - 10	50	1
DN25	5,8	5,8	4,5 - 10	50	2
DN25	9	9	5,7 - 10	50	3
DN25	22	16	3,5 - 10	80	1
DN32	1,1	-	3,5 - 10	50	1
DN32	3,1	-	4,5 - 10	50	2
DN32	5,2	-	5,7 - 10	50	3
DN32	12	12	3,5 - 10	80	1
DN32	17	16	4,4 - 10	80	2
DN32	22	16	5,6 - 10	80	3
DN32	11	11	1,3 - 10	125	1
DN32	23	16	2,2 - 10	125	2

Nominal size	Working pressure* (i.e. Differential) bar		Pilot pressure bar	Piston Ø mm	Springs
	stainless steel	bronze brass			
DN40	1,9	1,9	4,5 - 10	50	2
DN40	3,3	3,3	5,7 - 10	50	3
DN40	7	7	3,5 - 10	80	1
DN40	10	10	4,4 - 10	80	2
DN40	13	13	5,6 - 10	80	3
DN40	7	7	1,3 - 10	125	1
DN40	15	15	2,2 - 10	125	2
DN40	21	16	3,1 - 10	125	3
DN50	4	4	3,5 - 10	80	1
DN50	6	6	4,4 - 10	80	2
DN50	7,5	7,5	5,6 - 10	80	3
DN50	8,5	8,5	2,2 - 10	125	2
DN50	13	13	3,1 - 10	125	3
DN65	4	3,8 *	5,6 - 10	80	3
DN65	5	4,5 *	2,2 - 10	125	2
DN65	7	6,4 *	3,1 - 10	125	3
DN80	**	4,5 *	3,1 - 10	125	3

\* brass body

\*\* reinforced design

Standard

### NC with balanced plug (closing against flow)

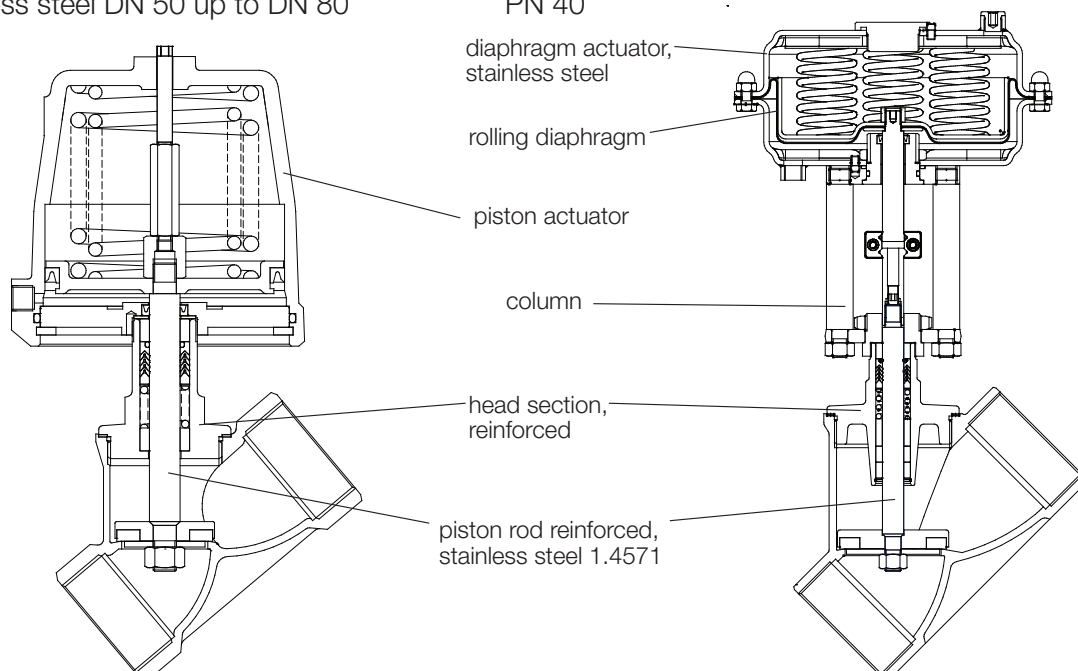
Nominal size	Working pressure (i.e. Differential) bar			Pilot pressure bar	Piston Ø mm	Springs
	seating seal PTFE	seating seal PEEK 8 (T>160°C)	seating seal PEEK 7 (T>160°C)			
DN32	40	40	-	4,5 - 10	50	2
DN32	40	40	40	4,4 - 10	80	2
DN40	40	20,1	-	4,5 - 10	50	2
DN40	40	40	-	5,7 - 10	50	3
DN40	40	40	40	4,4 - 10	80	2

Standard

### Angle Seat Valve 7010, reinforced design

stainless steel DN 50 up to DN 80

PN 40



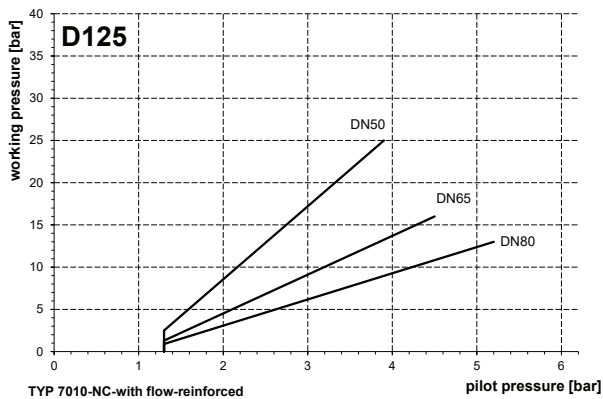
# Angle Seat Valve 7010

## 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.

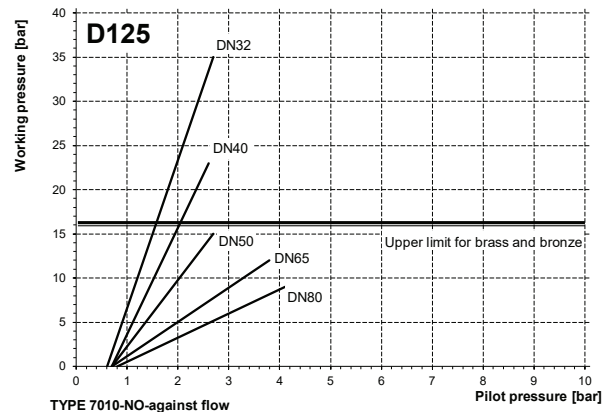
### Piston actuator diameter D125 mm - one strong spring



### Spring opens NO (closing against flow)

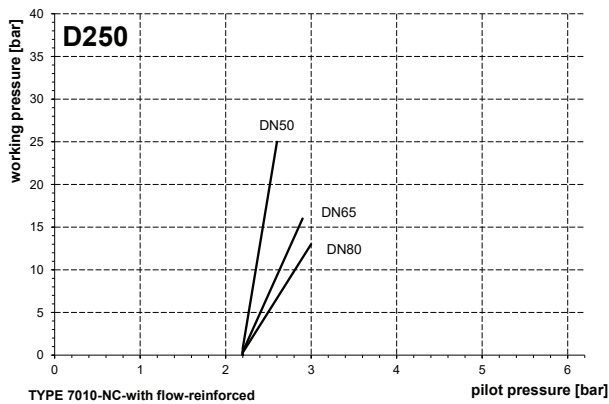
Normally open angle seat valves, closing against the flow.

### Piston actuator diameter D125 mm

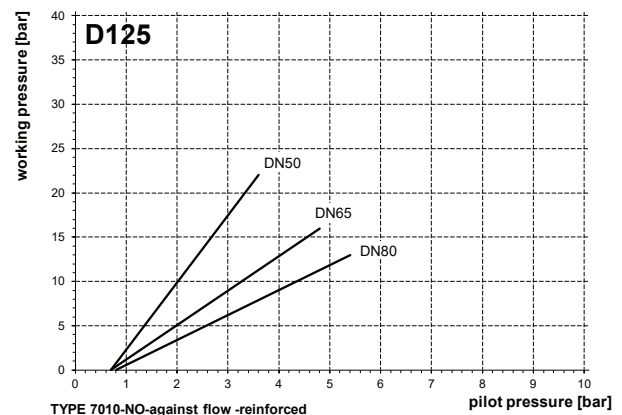


maximum pilot pressure 0,5 bar more than pilot pressure for working pressure

### Diaphragm actuator diameter D250 mm

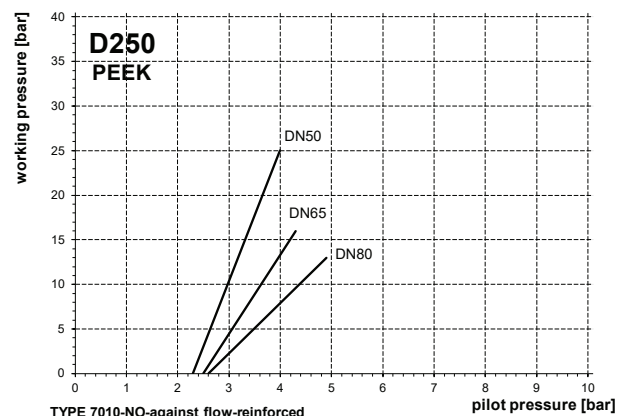


### Piston actuator diameter D125 mm PEEK seating seal



maximum pilot pressure 0,5 bar more than pilot pressure for working pressure

### Diaphragm actuator diameter D250 mm PEEK seating seal



maximum pilot pressure 0,5 bar more than pilot pressure for working pressure

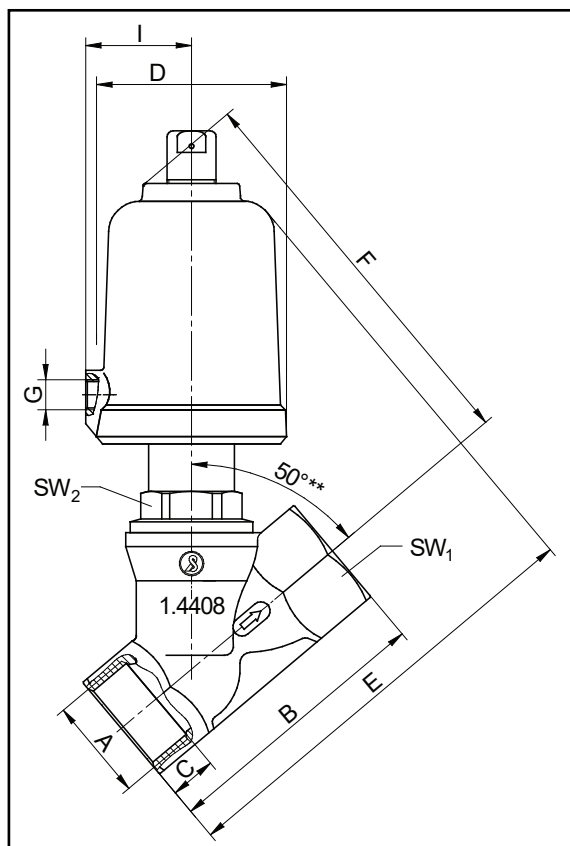
higher pressures on request



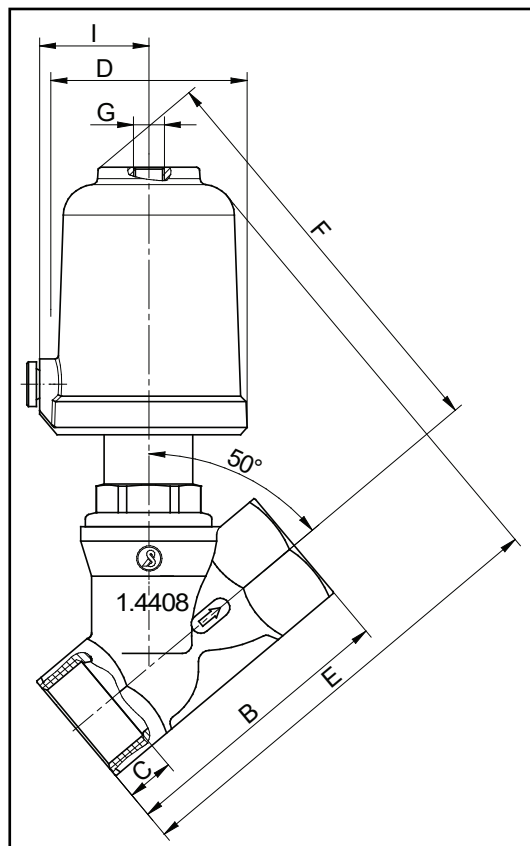
# Angle Seat Valve 7010

## standard design

### Dimensions and Weights



Normally closed



Normally open

\*\* <= 45° for DN65, brass body for DN80 and stainless steel body for DN80

DN	actuator diameter	A G/NPT	B		C	D	E		F	G	H (stroke)	I	SW1		SW 2		Kvs-values		Weight (kg)
			bronze * stainl.st.	brass			bronze * stainl.st.	brass					bronze * stainl.st.	brass	stand.	reinfor.	bronze * stainl.st.	brass	
8	50	1/4"	60	-	12	62	130	-	123	G1/8"	8,5	34,5	20	-	30	-	0,95	-	1
10	50	3/8"	60	-	12	62	130	-	123	G1/8"	9	34,5	23	-	30	-	1,6	-	1,05
15	50	1/2"	65	-	15	62	135	-	120	G1/8"	7	34,5	25	-	30	-	3,5	-	1,1
20	50	3/4"	75	-	16,3	62	135	-	125	G1/8"	12	34,5	31	-	30	-	8	-	1,2
25	50	1"	90	-	19,1	62	145	-	130	G1/8"	16	34,5	39	-	30	-	15	-	1,4
25	80	1"	90	-	19,1	96	185	-	170	G1/4"	16	55	39	-	30	-	16	-	3
32	50	1 1/4"	110	-	21,4	62	160	-	145	G1/8"	16	34,5	48	-	30	-	21	-	1,8
32	80	1 1/4"	110	-	21,4	96	200	-	190	G1/4"	20	55	48	-	30	-	24	-	3,3
32	125	1 1/4"	110	-	21,4	146	230	-	215	G1/4"	20	80	48	-	30	-	24	-	5,5
40	50	1 1/2"	120	-	21,4	62	165	-	150	G1/8"	16	34,5	55	-	30	-	30	-	2,1
40	80	1 1/2"	120	-	21,4	96	205	-	195	G1/4"	23	55	55	-	30	-	35	-	3,6
40	125	1 1/2"	120	-	21,4	146	235	-	220	G1/4"	23	80	55	-	30	-	35	-	5,8
50	50	2"	150	-	25,7	62	185	-	160	G1/8"	16	34,5	68	-	32	-	40	-	2,7
50	80	2"	150	-	25,7	96	225	-	200	G1/4"	29	55	68	-	32	36	55	-	4,2
50	125	2"	150	-	25,7	146	250	-	225	G1/4"	29	80	68	-	32	36	55	-	6,4
65	80	2 1/2"	180	180	30,2	96	260	260	220	G1/4"	29	55	85	85	36	41	80	93	6,2
65	125	2 1/2"	180	180	30,2	146	285	285	250	G1/4"	29	80	85	85	36	41	80	93	8,4
80	80	3"	214	210	33,3	96	290	280	225	G1/4"	29	55	100	100	41	41	112	115	8,3
80	125	3"	214	210	33,3	146	315	305	250	G1/4"	29	80	100	100	41	41	112	115	10,5

\* Dimensions in accordance with DIN 3202 T4 M8

Dimensions in mm

# Angle Seat Valve 7010

## pressure balanced version

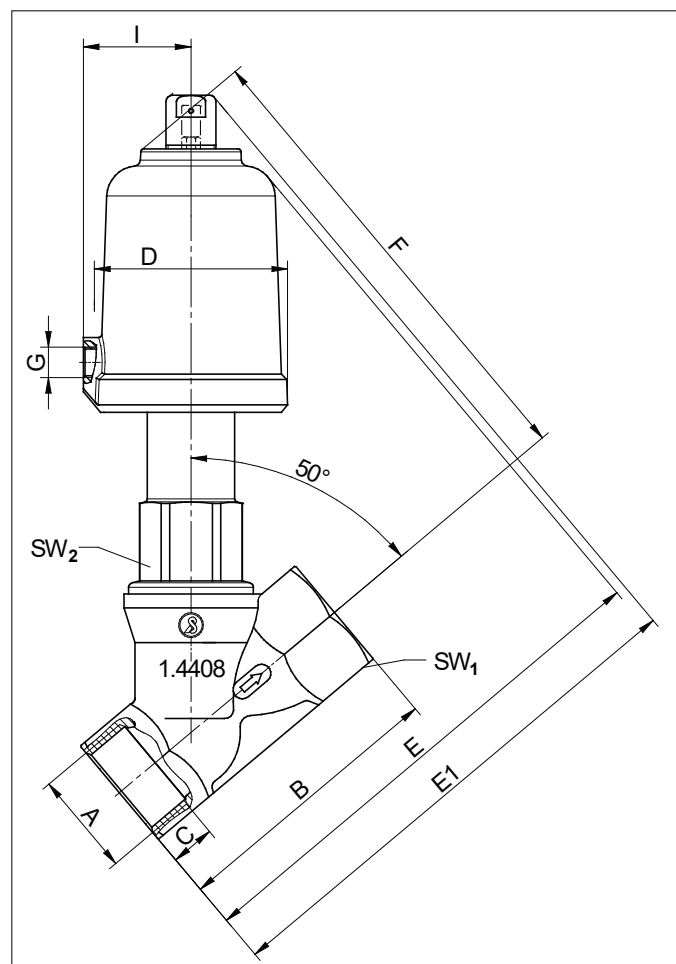
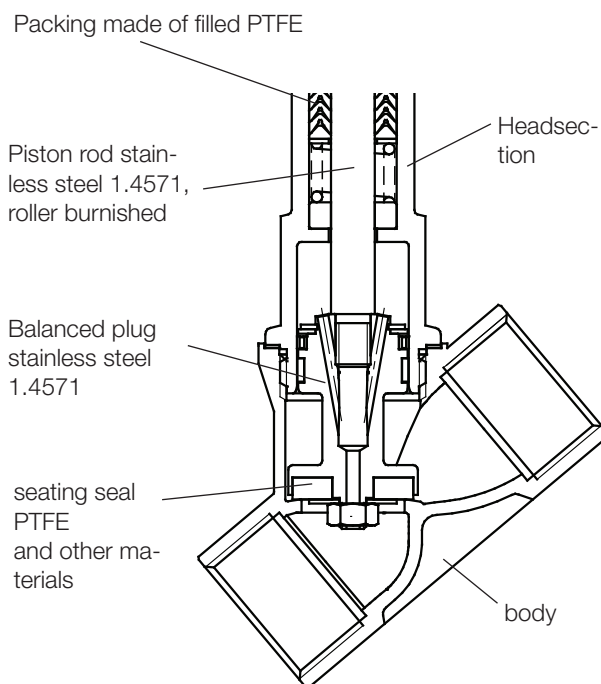
The pressure balanced valve construction enables a reliable control of high operating pressures even for big sizes. In most cases a smaller actuator with less air consumption may be chosen.

### spring closes, pressure balanced (closing against flow)

Nominal size	Working pressure (i.e. Differential) bar			Pilot pressure bar	Piston Ø mm	Springs
	seating seal PTFE	seating seal PEEK 8 (T>160°C)	seating seal PEEK 7 (T>160°C)			
DN32	40	40	-	4,5 - 10	50	2
DN32	40	40	40	4,4 - 10	80	2
DN40	40	17	-	4,5 - 10	50	2
DN40	40	40	-	5,7 - 10	50	3
DN40	40	40	40	4,4 - 10	80	2

Standard for PTFE-seals

### Build up, dimensions and weight

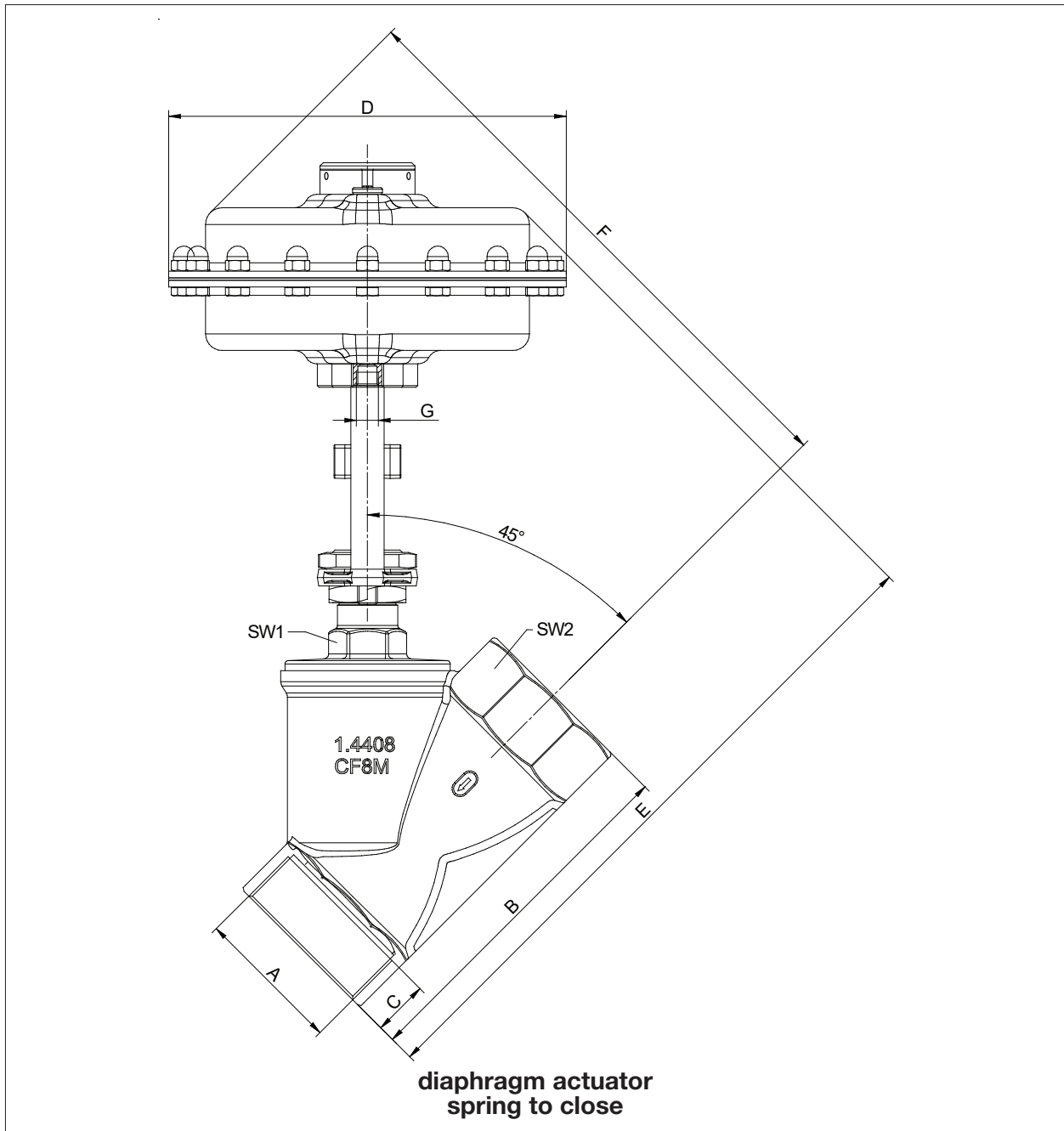


DN	actuator	A G/NPT	B stainless steel	C	D	E stainless steel	F	G	H (stroke)	I	SW1 stainless steel	SW 2 Stand.	Kvs-value stainless steel	weight (kg)
32	50	1 1/4"	110	21,4	62	175	165	G1/8"	16	34,5	48	30	21	2
32	80	1 1/4"	110	21,4	96	215	205	G1/4"	16	55	48	30	24	3,8
40	50	1 1/2"	120	21,4	62	185	175	G1/8"	16	34,5	55	30	30	2,3
40	80	1 1/2"	120	21,4	96	220	210	G1/4"	21	55	55	30	35	4,1

# Angle Seat Valve 7010

## reinforced design

### Dimensions and Weights



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

Data sheet /Version: 27.08.2012

DN	Actuator (mm)	A Rp/NPT	B*	C	D	E	F	G	Stroke (mm)	SW1	SW2	$\alpha$	Kvs-value	Weight (kg)
50	250	2"	150	25,7	238	338	323	G1/4"	25	68	32	50°	55	14,6
65	250	2 1/2"	180	30,2	238	366	346	G1/4"	25	85	41	45°	80	15,7
80	250	3"	210	33,3	238	407	350	G1/4"	25	100	41	45°	-	17,8

\* Dimensions in accordance with DIN 3202 T4 M8

Dimensions in mm