

Angle Seat Valve 7010

DN 8 up to DN 80 PN 16 - PN 40

SCHUBERT & SALZER
**CONTROL
SYSTEMS**

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 97/23/EG (category I): PS x DN < 1000		
Working pressure for packing underneath	maximum 12 bar		
Working pressure for Tri-Clamp connection	maximum 16 bar		

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



TÜVRheinland®
TA-Luft zertifiziert

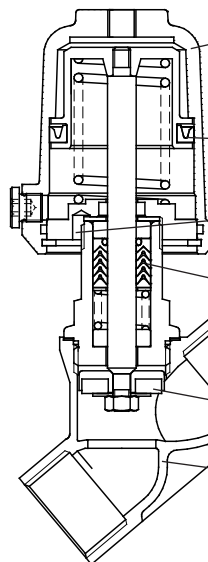
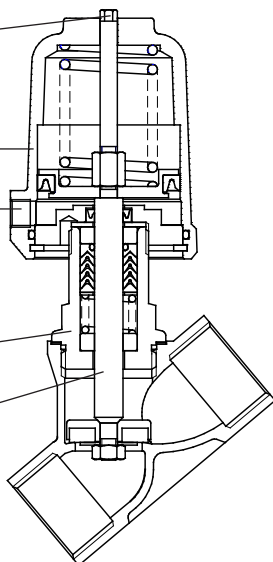
Options

- 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

- Removable position indicator
- Bonnet can be rotated as required
- Direct pressure control (with a pilot valve if required)
- actuation by air, water, mineral oil and other media
- Head Section
- Piston rod stainless steel 1.4571, „roller burnished“



- Bonnet material chrome plated brass, plastic, stainless steel (Ø 50/80 mm), Aluminium Ø 125 mm)
- Exterior lip sealing
- Leak detector
- PTFE packing, special version free or dead space (packing underneath)
- Seating seal in PTFE and other materials
- Body

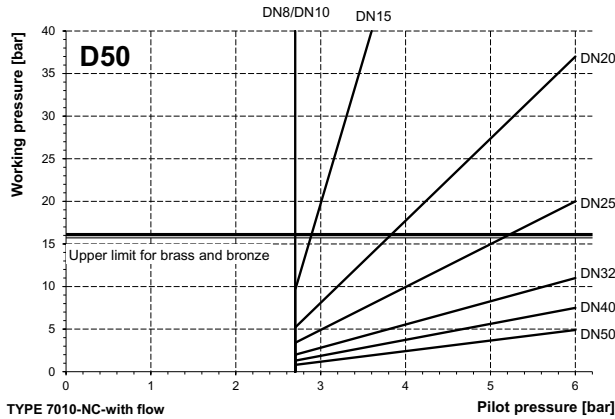
Angle Seat Valve 7010

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.

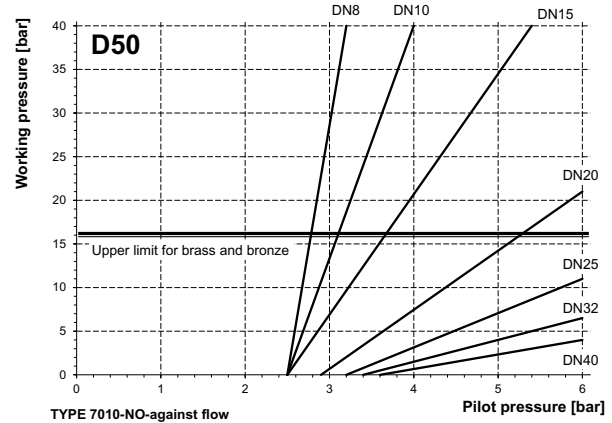
Actuator diameter 50 mm



Spring opens NO (closing against flow)

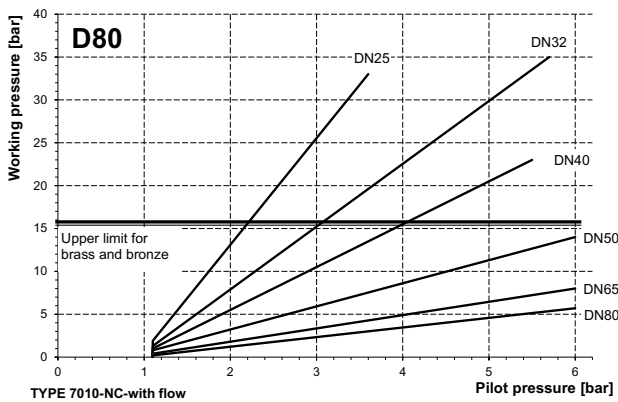
Normally open angle seat valves, closing against the flow.

Actuator diameter 50 mm

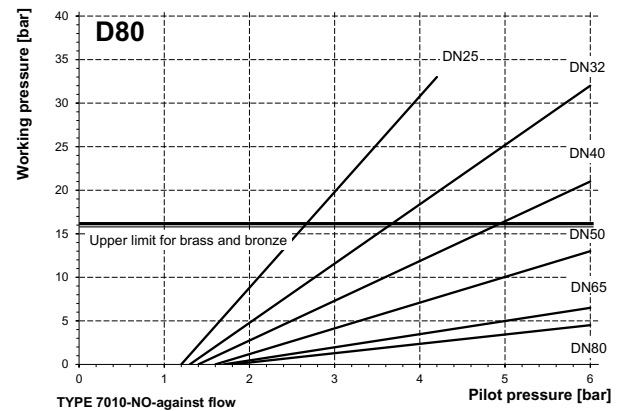


maximum pilot pressure 1 bar more than necessary pilot pressure for working pressure

Actuator diameter 80 mm

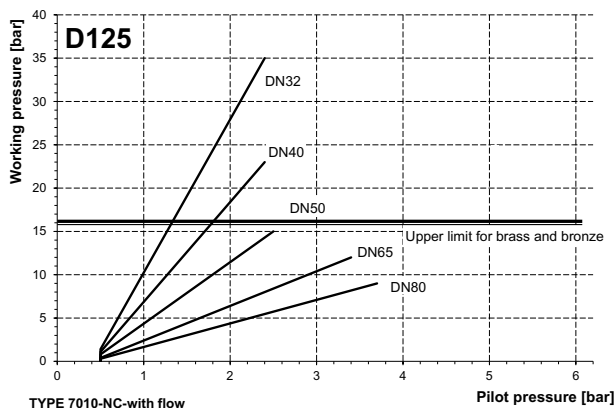


Actuator diameter 80 mm

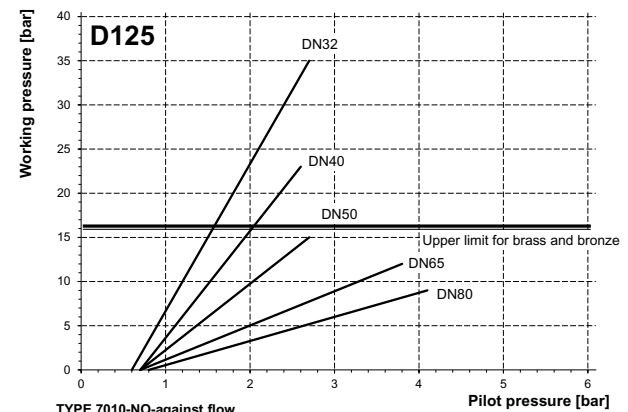


maximum pilot pressure 0,8 bar more than necessary pilot pressure for working pressure

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	1,1	3,5 - 10	50	1
DN32	3,1	3,1	4,5 - 10	50	2
DN32	5,2	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

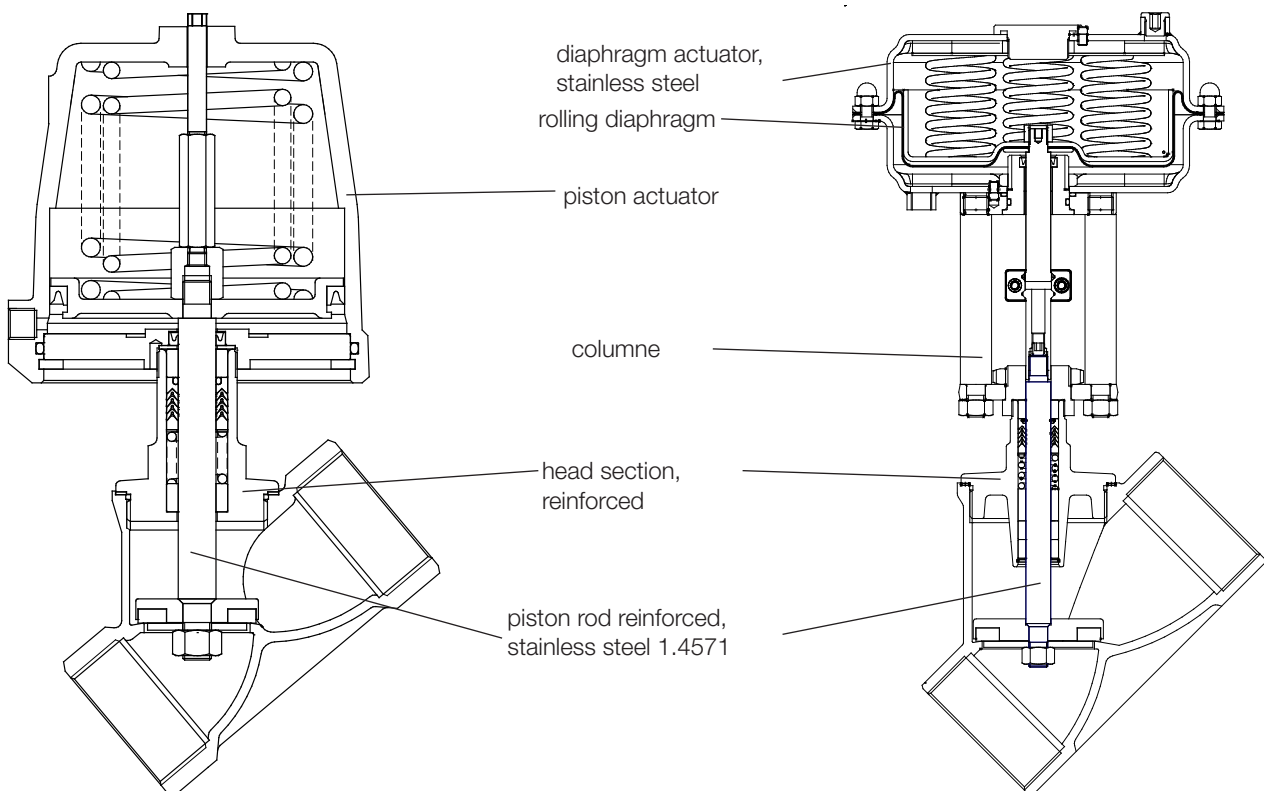
** reinforced design

Standard

Angle Seat Valve 7010, reinforced design

stainless steel DN 50 up to DN 80

PN 40



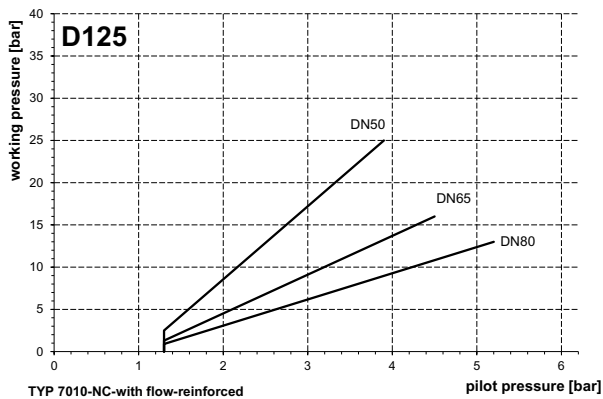
Angle Seat Valve 7010

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.

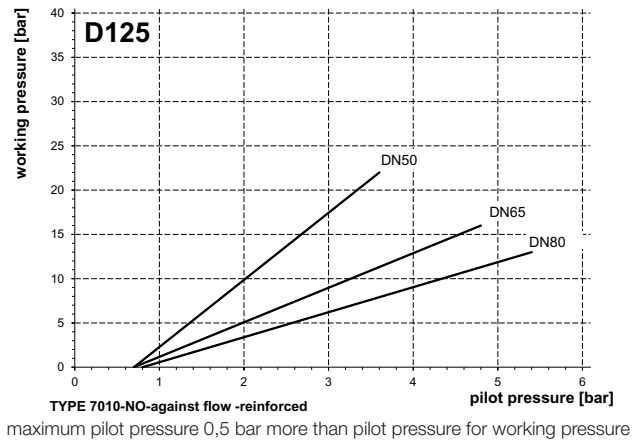
Piston actuator diameter D125 mm - one strong spring



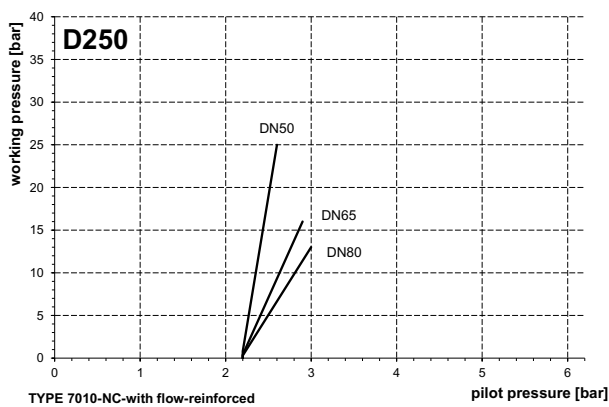
Spring opens NO (closing against flow)

Normally open angle seat valves, closing against the flow.

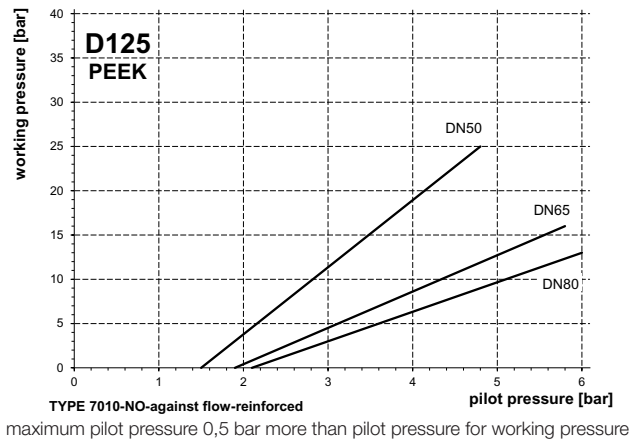
Piston actuator diameter D125 mm



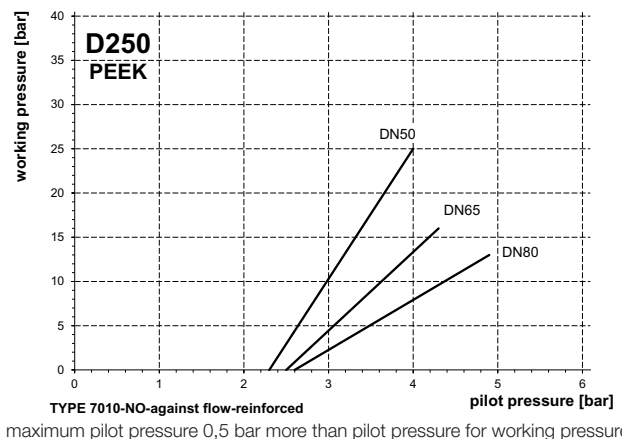
Diaphragm actuator diameter D250 mm



Piston actuator diameter D125 mm PEEK seating seal



Diaphragm actuator diameter D250 mm PEEK seating seal



higher pressures on request

NC (closing against flow)

Nominal size	max. Working pressure (differential pressure) bar stainless steel	Pilot pressure (bar)	Diaphragm area D mm	Springs number
DN50	12	3,1 - 10	125	3
DN50	19	2,7 - 6	250	8
DN50	25	3,7 - 6	250	12
DN65	6	3,1 - 10	125	3
DN65	10	2,7 - 6	250	8
DN65	14	3,7 - 6	250	12
DN80	4	3,1 - 10	125	3
DN80	7	2,7 - 6	250	8
DN80	10	3,7 - 6	250	12
Standard				

Limitation for dangerous gases according Pressure Equipment Directive 97/23/EC (category II)
PS x DN < 1000

Ordering Number System

7	0	1	0	/				V									S
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Type Size

Symbol: "V": Valve
"A": Actuator (valve without body)
"R": Repair kit (sealings)

1 - 6 : Please quote all 6 sections.
7 - 12: Quote only if required.

1. Body type	2. Connection	3. Body material	4. Seating seal	5. Pilot function	6. Actuator
1 angle body	0 pipe thread acc. ISO 228-1 5 NPT-thread 6 without thread D welding ends acc. DIN H welding ends acc. ISO Z Tri-clamp acc. Inch	0 brass (only DN65+80) 1 bronze Rg5 2 stainless steel 1.4408	0 PTFE 1 FKM (Viton) 2 EPDM 3 NBR	0 NC (closing with flow) 1 NO (closing against flow) 2 NC (closing against flow) 3 Universal, double acting	0 piston Ø50mm 1 piston Ø80mm 2 piston Ø125mm C diaphragm actuator D250mm K plastic bonnet (piston Ø50mm) M plastic bonnet (piston Ø80mm)

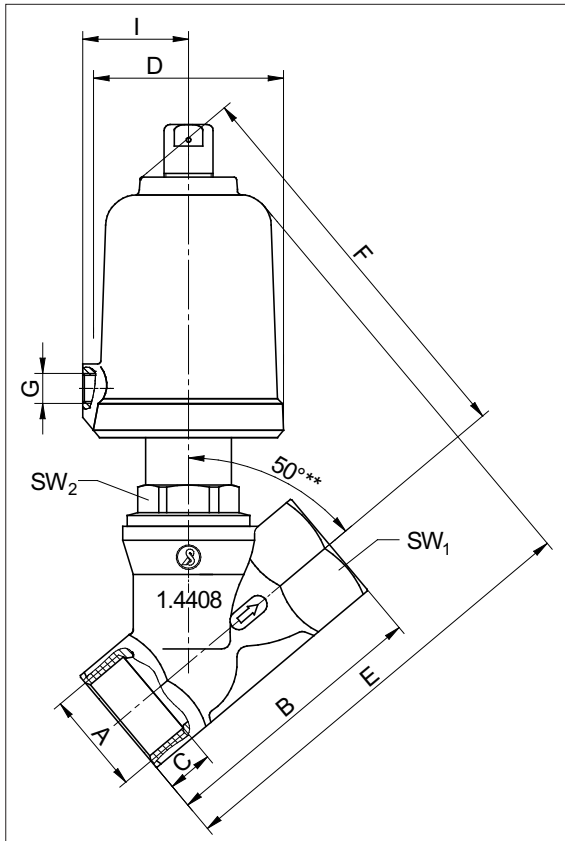
7. Springs	8. Head section material	9. Packing	10. Temperature version	11. Accessories	12. Special versions
- standard 1 1 spring 2 2 springs 3 3 springs T 6 springs (D250) W 8 springs (D250) Y 12 springs (D250)	- standard K reinforced design	- standard packing underneath 2	- Standard H high temperature version V viton exterior lip sealing U low temperature version down to -50°C, fluid temperature W low temperature version down to -40°C ambient temperature	- no accessories 1 electrical position indicator with one switch 2 electrical position indicator with two switches 3 manual emergency operation 4 manual override 5 stroke limitation 6 pilot valve DN 2, 230 V AC 7 pilot valve DN 2, 24 V DC K electr. position indicator compact M position indicator with two ind. switch 10 - 36 V DC (PNP) P position indicator with one ind. switch 10 - 36 V DC (PNP) T position indicator compact, inductive 10 - 30 V DC (PNP)	S further special versions M position indicator with cable bushing N position indicator with plug connection

Ordering example:

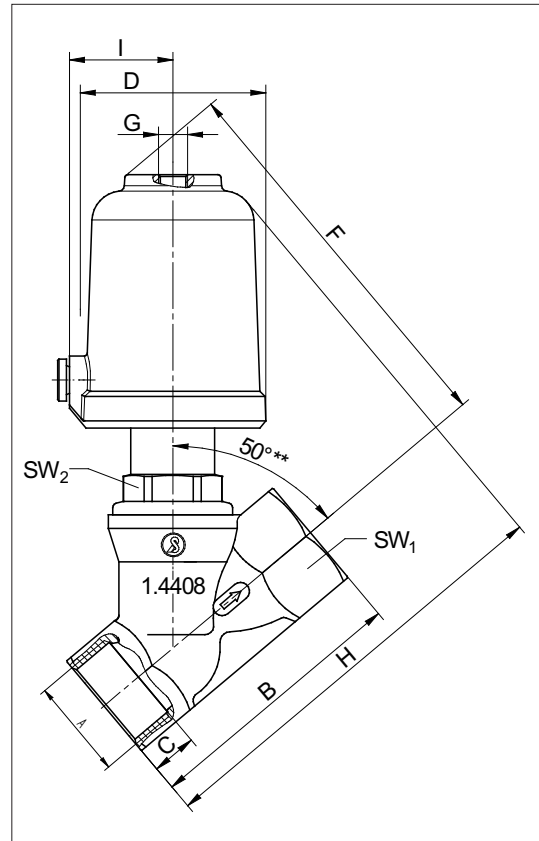
7010/050V1020212- -5

Nominal size 50 mm, angle seat valve, pipe thread acc. DIN 2999, stainless steel body, PTFE seatmaterial, N.C., actuator size 80 mm, two springs, stroke limitation.

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	I	SW1		SW 2		Kvs-values		Weight (kg)
			bronze * stainl.st.	brass			bronze * stainl.st.	brass			(stroke)		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

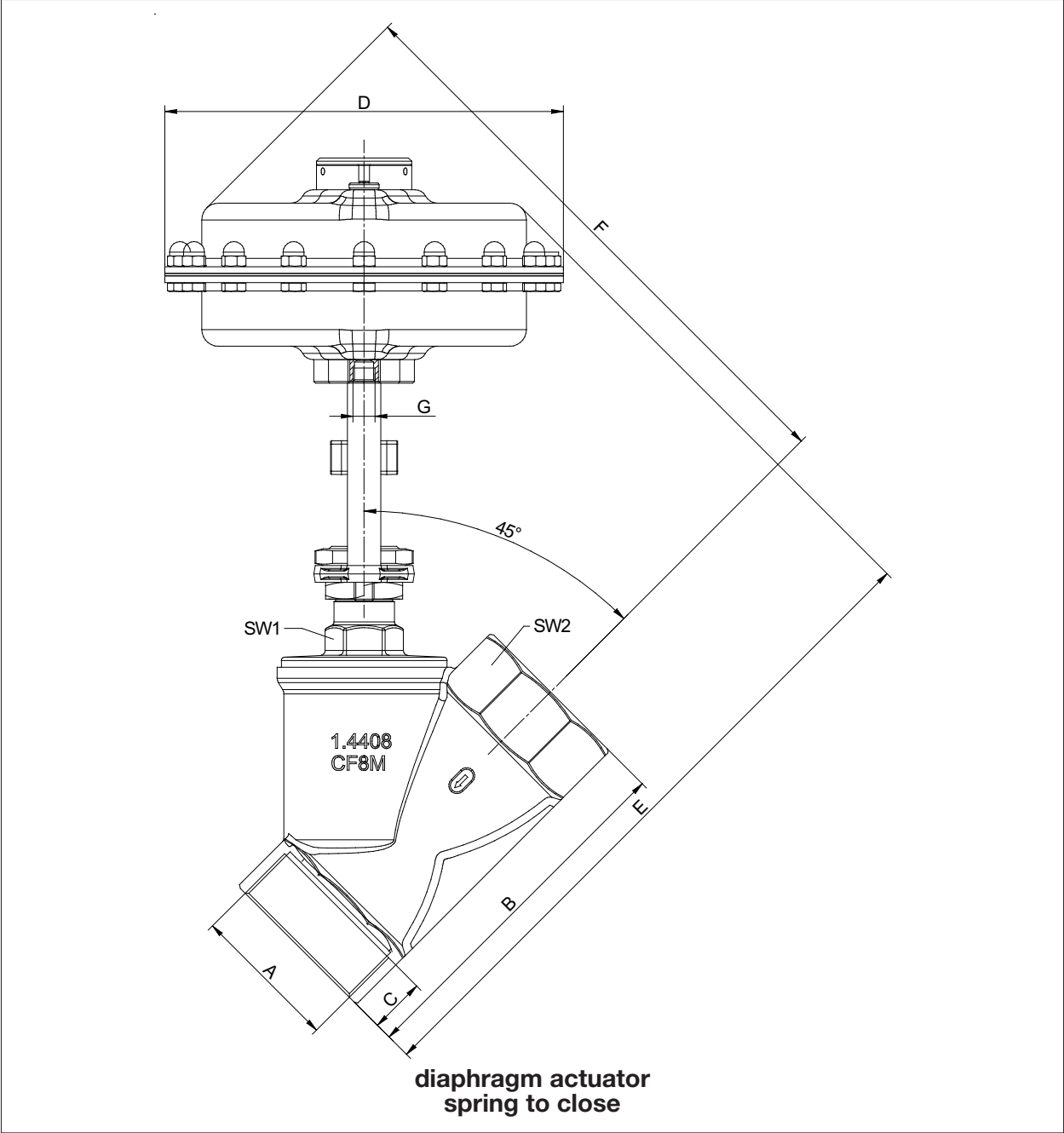
Dimensions in mm

Angle Seat Valve 7010

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	α	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