

Right Angled Seat Valve 7050 SCHUBERT & SALZER

DN 15 up to DN 50

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

- Compact design
- Unaffected by lightly contaminated media
- For temperatures from -100°C up to +220°C
- Working pressure up to 40 bar
- Versatile actuator options
- High Kvs-values

Technical Information

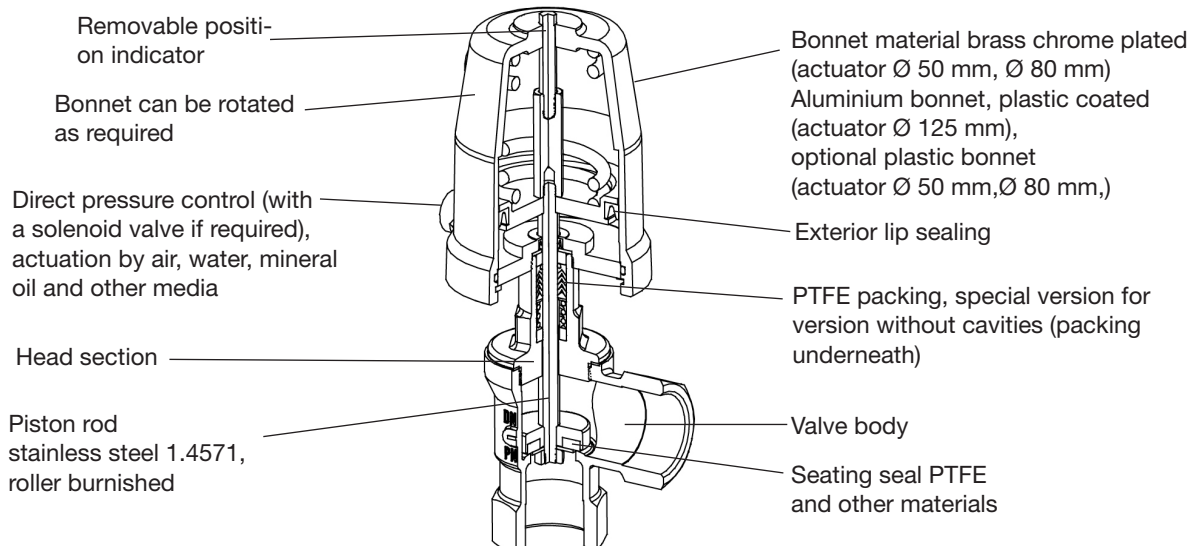
Nominal sizes	DN 15 up to DN 50
Body material	1.4408
Connection	
Pipe thread acc. ISO 228-1	1/2" - 2"
NPT thread	1/2" - 2"
Nominal pressure	PN 40
Max. fluid temperature*:	
with metal bonnet	-30°C up to +170°C, opt. -100°C up to 220°C
with plastic bonnet	-30°C up to +135°C
with diaphragm actuator	-30°C up to +200°C, opt. -30°C up to 220°C
Ambient temperature*	-15°C up to +60°C (special versions from -40°C up to +100°C)
Viscosity of media	maximum 600 mm ² /s (600cSt, 80°E)
Vakuum	maximum 0,001 bar 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
Leakage acc. EN 12266-1	leakage class A
Packing leakage	tested according to TA-Luft as defined in DIN EN ISO 15848-1 and VDI 2440

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



Options

- e. g.:
- limit switches
 - inductive proximity switch
 - electrical switches
 - pneumatic switches
 - pilot valves
 - manual override
 - oil and grease free version



Right Angled Seat Valve 7050

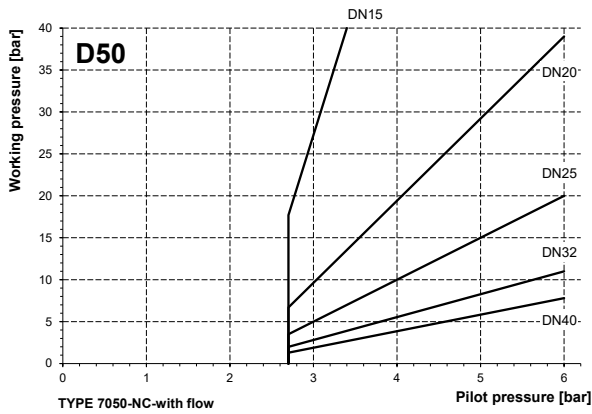
standard design



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. For HT-version with actuator \varnothing 50 mm the pilot pressure has to be increased by 0.9 bar.

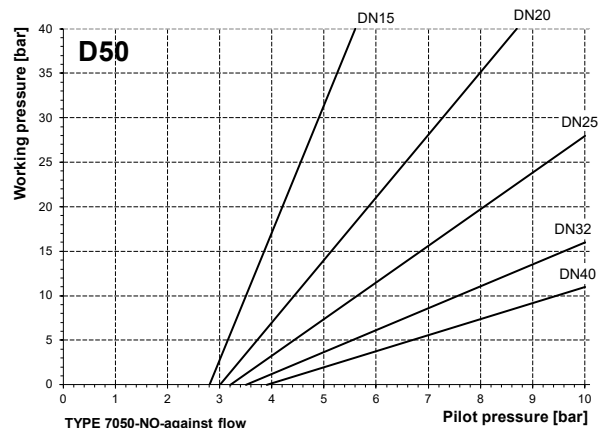
Actuator diameter 50 mm



Spring opens NO (closing against flow)

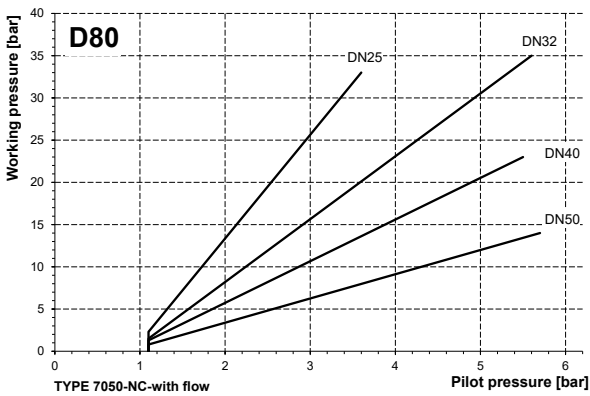
Normally open angle seat valves, closing against the flow.

Actuator diameter 50 mm

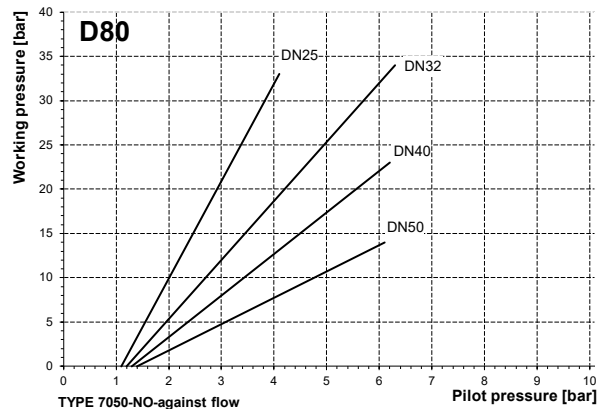


maximum pilot pressure 1 bar more than pilot pressure for working pressure

Actuator diameter 80 mm

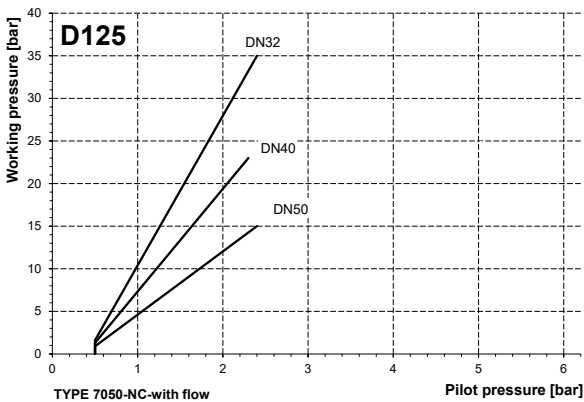


Actuator diameter 80 mm

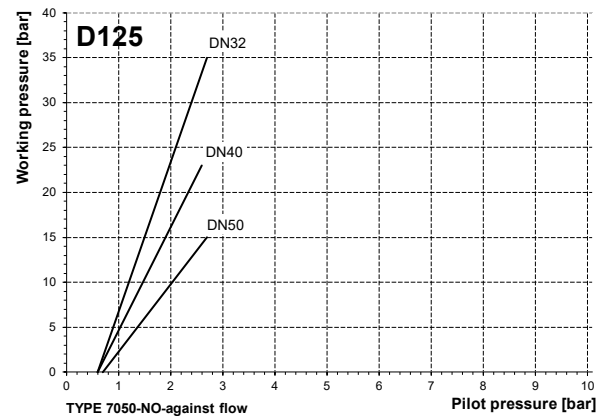


maximum pilot pressure 0,8 bar more than pilot pressure for working pressure

Actuator diameter 125 mm



Actuator diameter 125 mm



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

Right Angled Seat Valve 7050

standard design

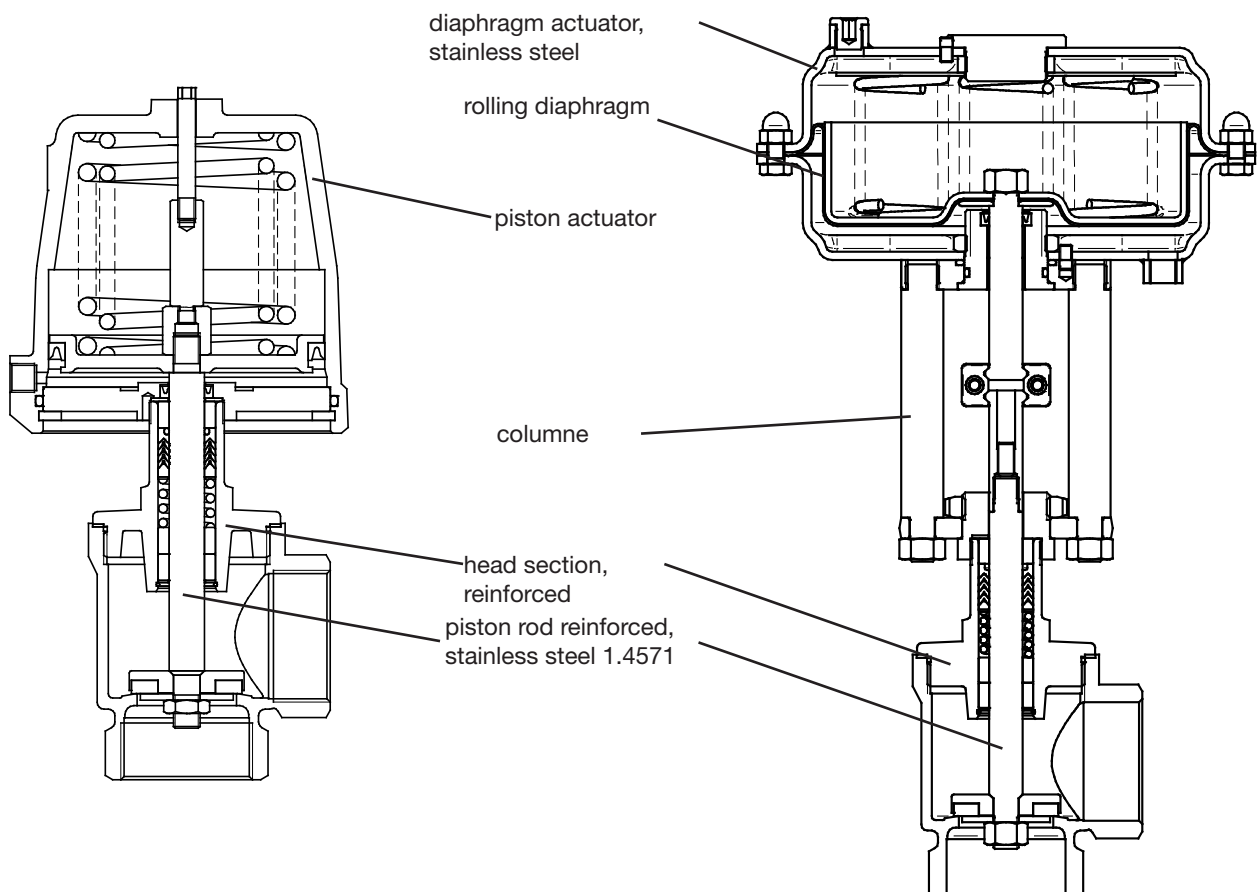
NC (closing against flow)

Nominal size DN	max. working pressure (diff. pressure) [bar]	pilot pressure [bar]	Actuator diameter	Number of springs
DN15	15	3,5 - 10	50 mm	1
DN15	27	4,5 - 10	50 mm	2
DN20	5,1	3,5 - 10	50 mm	1
DN20	10	4,5 - 10	50 mm	2
DN20	16	5,7 - 10	50 mm	3
DN25	2,3	3,5 - 10	50 mm	1
DN25	5,6	4,5 - 10	50 mm	2
DN25	8,9	5,7 - 10	50 mm	3
DN25	20	3,5 - 10	80 mm	1
DN32	3,1	4,5 - 10	50 mm	2
DN32	5,1	5,7 - 10	50 mm	3
DN32	11	3,5 - 10	80 mm	1
DN32	16	4,4 - 10	80 mm	2
DN32	21	5,6 - 10	80 mm	3
DN32	10	1,3 - 10	125 mm	1

Nominal size DN	max. working pressure (differential pressure) [bar]	pilot pressure [bar]	Actuator diameter	Number of springs
DN32	22	2,2 - 10	125 mm	2
DN40	1,9	4,5 - 10	50 mm	2
DN40	3,4	5,7 - 10	50 mm	3
DN40	6,8	3,5 - 10	80 mm	1
DN40	9,6	4,4 - 10	80 mm	2
DN40	12	5,6 - 10	80 mm	3
DN40	6,3	1,3 - 10	125 mm	1
DN40	14	2,2 - 10	125 mm	2
DN40	20	3,1 - 10	125 mm	3
DN50	4	3,5 - 10	80 mm	1
DN50	5,9	4,4 - 10	80 mm	2
DN50	7,7	5,6 - 10	80 mm	3
DN50	8,7	2,2 - 10	125 mm	2
DN50	12	3,1 - 10	125 mm	3

 = Standard (2 springs)

Right Angled Seat Valve 7050, reinforced design stainless steel DN40 and DN50 PN40



Right Angled Seat Valve 7050

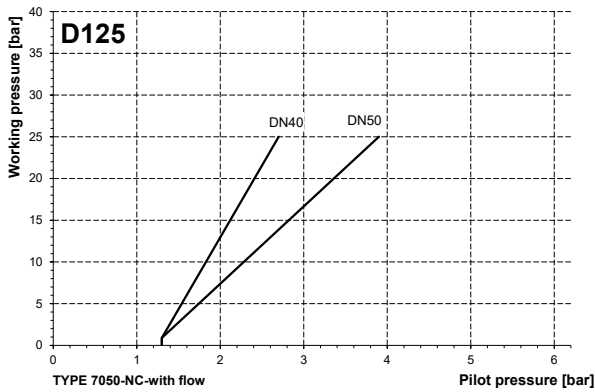
reinforced design



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. For HT-version with actuator Ø 50 mm the pilot pressure has to be increased by 0.9 bar.

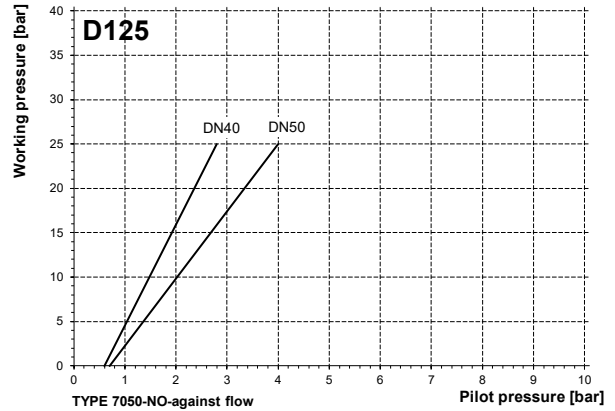
Actuator diameter 125 mm - a strong spring



Spring opens NO (closing against flow)

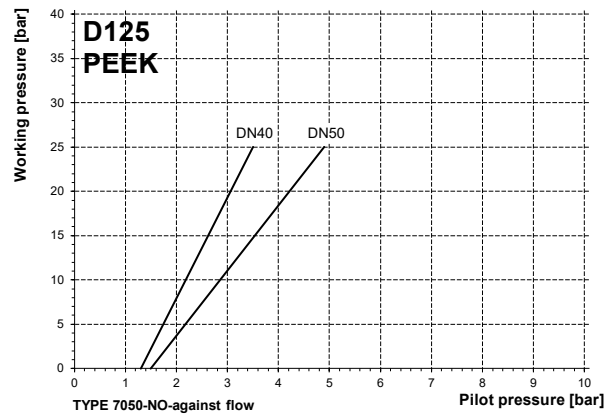
Normally open angle seat valves, closing against the flow.

Actuator diameter 125 mm



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

Actuator diameter 125 mm PEEK seating seal



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

NC (closing against flow)

Nominal size	Working pressure max. (differential pressure) bar	Pilot pressure bar	Piston Ø mm	Springs
DN40	20	3,1 - 10	125	3
DN40	25	2,8 - 6	250	8
DN50	12	3,1 - 10	125	3
DN50	15	2,2 - 6	250	6
DN50	19	2,8 - 6	250	8
DN50	24	3,7 - 6	250	12

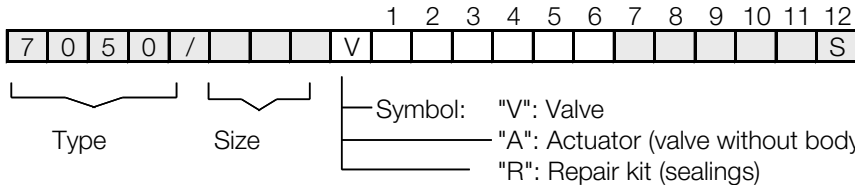
Standard

higher pressures on request

Right Angled Seat Valve 7050



Ordering Number System



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

1.	Body type	2.	Connection	3.	Body materials	4.	Seat materials	5.	Pilot function	6.	Actuator, Ø
7	Right angled seat valve	0	pipe thread acc. ISO 228-1	2	Stainless steel (rustproof, acid resistant) PN 40 1.4408	0	PTFE	0	NC (closing with flow)	0	Piston 50 mm
		5	NPT thread			1	FKM	1	NO (closing against flow)	1	Piston 80 mm
						2	EPDM	2	NC (closing against flow)	2	Piston 125 mm C diaphragm D250 mm
						3	NBR	3	Universal, double acting	K	piston Ø50mm with Kunststoffhaube plastic bonnet
										M	piston Ø80mm with plastic bonnet

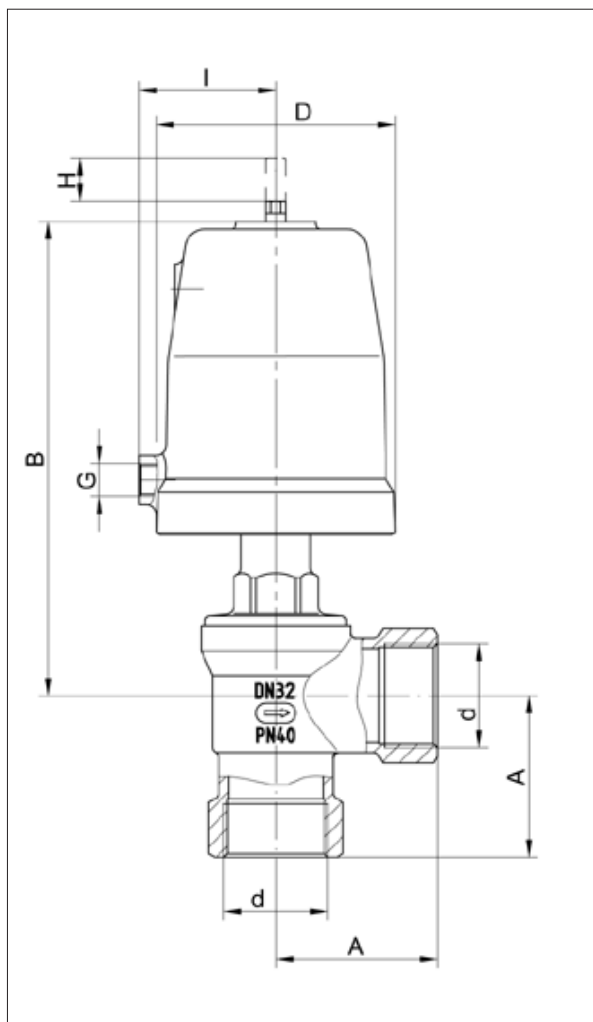
7.	Springs	8.	Head section material	9.	Packing	10.	Temperature version	11.	Accessories	12.	Other special versions
-	Standard	-	Standard	-	Standard	-	Standard	-	No accessories	M	Position indicator with cable bushing
1	1 spring			2	Packing underneath	H	High temperature version +200°C	1	Electrical position indicator with one switch		
2	2 springs					V	Viton exterior lip seal	2	As above but with two switches	N	Position indicator with plug connection
3	3 springs							3	Manual emergency operation		
T	6 springs							4	Additional manual operation		
	(D250)							5	Stroke limitation	S	If after inquiries, further special versions are agreed upon insert "S" here!
W	8 springs (D250)							6	Pilot valve DN 2, 230 V AC		
Y	12 springs (D250)							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)		

Ordering example: 7050/050V7020212 - - - 5
 Right angled seat valve type 7050, DN 50, connection pipe thread acc. DIN 2999 / ISO 228, Body material stainless steel, seating seal PTFE, NC closing against flow, actuator 80 mm, two springs, stroke limitation

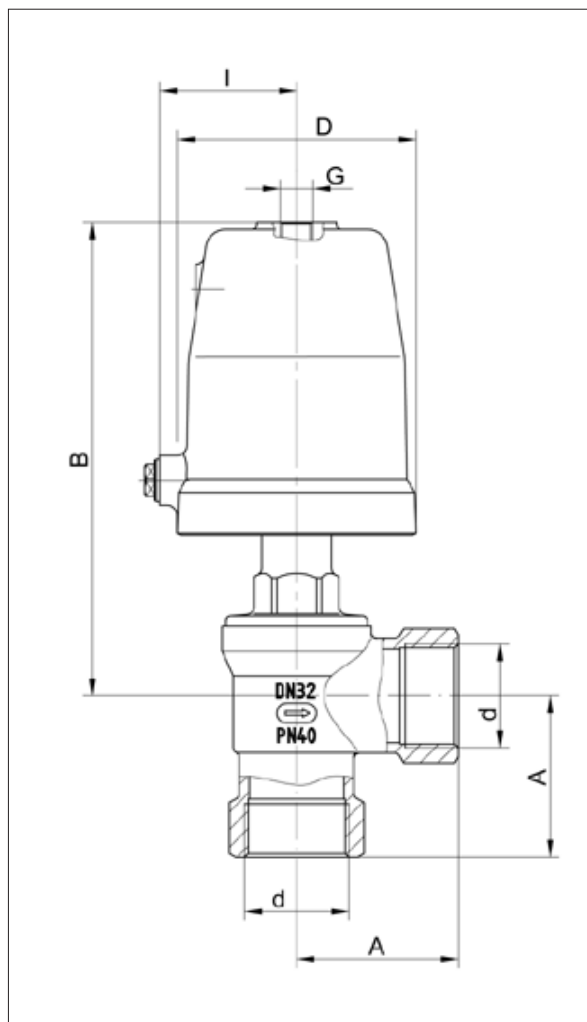
reinforced design (from DN40):

Ordering example: 7050/050V7020223 - - - 5S-K
 Right angled seat valve type 7050, DN 50, connection pipe thread acc. DIN 2999 / ISO 228, body material stainless steel, seating seal PTFE, NC closing against flow, actuator 125 mm, three springs, stroke limitation, reinforced design „K“

Dimensions and Weights



normally closed



normally open

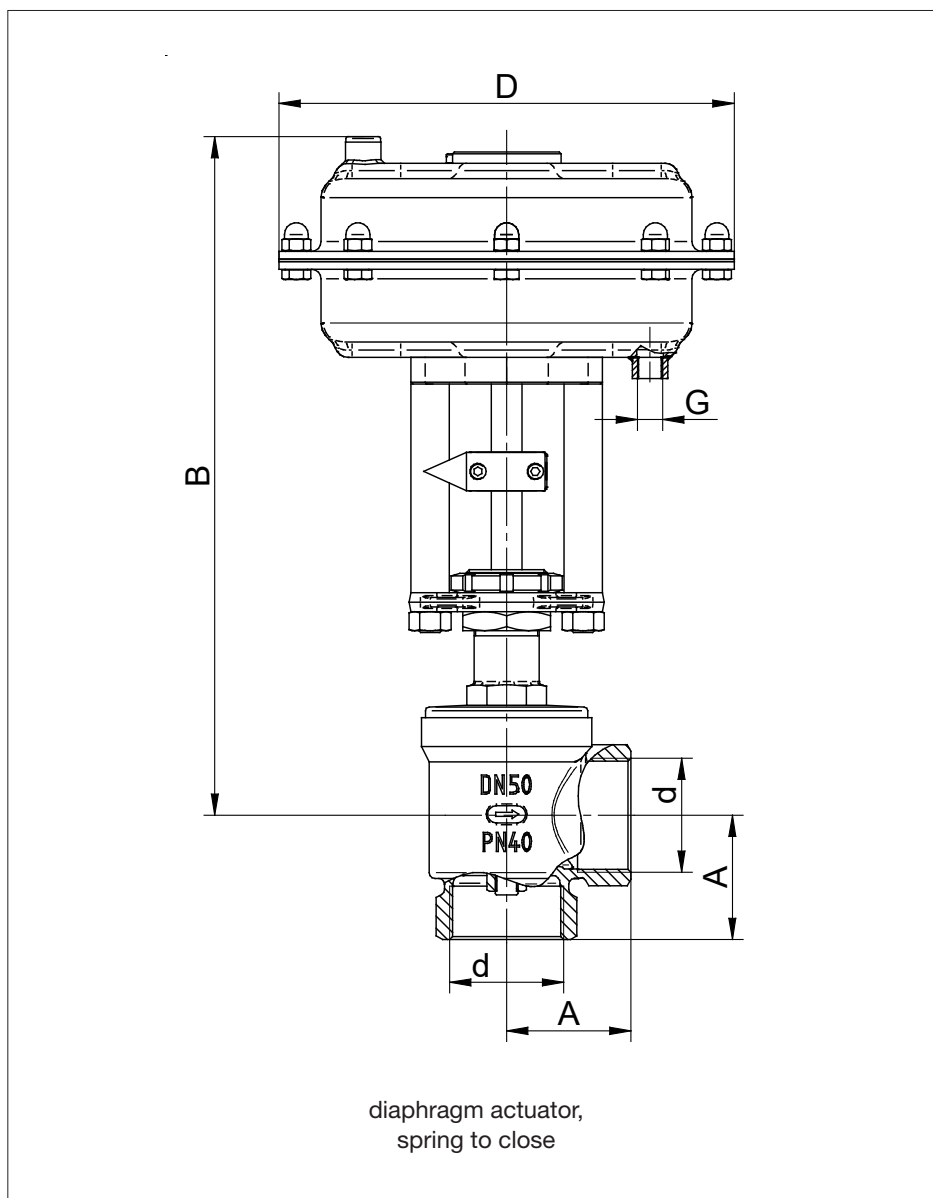
DN	Actuator	A	B	D	d	G	Stroke	I	Kvs-value
15	50	41	139	62	1/2"	1/8"	12	34,5	5,1
20	50	41	140	62	3/4"	1/8"	15,5	34,5	11,5
25	50	41	140,5	62	1"	1/8"	15,5	34,5	20
25	80	41	179,5	98	1"	1/4"	20	55	20
32	50	65	153,5	62	1 1/4"	1/8"	15,5	34,5	25
32	80	65	192,5	98	1 1/4"	1/4"	23	55	30
32	125	65	216,5	144	1 1/4"	1/4"	23	55	30
40	50	65	160,5	62	1 1/2"	1/8"	15,5	34,5	40
40	80	65	199,5	98	1 1/2"	1/4"	28,5	55	45
40	125	65	223,5	144	1 1/2"	1/4"	28,5	55	45
50	80	65	216	98	2"	1/4"	30	55	65
50	125	65	240	144	2"	1/4"	30	55	65

Dimensions in mm

Right Angled Seat Valve 7050

reinforced design

Dimensions and Weights



DN	Actuator	A	B	D	d	G	Stroke	Kvs-value	Weight [kg]
40	250	65	347	238	1 1/2"	G1/4"	24	42	12,5
50	250	65	355	238	2"	G1/4"	24	49	13,5

Dimensions in mm